

Pioneer

Plasma Display
Écran à plasma
プラズマディスプレイ

PDP-502MX

Operating Instructions
Mode d'emploi
取扱説明書

Contents related to system specifications, power requirements, accessories, and other information differ with respect to the country where this unit is purchased. For customers living in the U.S.A. or Canada, please use and refer to the instructions written in either English or French. For customers in Japan, please use and refer to the instructions written in Japanese.

Les caractéristiques, les spécifications d'alimentation, les accessoires et d'autres informations diffèrent d'un pays à l'autre. Si vous vivez au Canada ou aux États-Unis, reportez-vous aux instructions en français ou en anglais. Si vous vivez au Japon, reportez-vous aux instructions en japonais.

電源、付属品等の差異がありますので、日本国内でご購入・ご使用の際は、本書の日本語ページをご覧ください。その他の国、地域でご購入・ご使用の際は、英語またはフランス語ページをご覧ください。

Safety Precautions

IMPORTANT



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

The following symbols are found on labels attached to the product. They alert the operators and service personnel of this equipment to any potentially dangerous conditions.

WARNING

This symbol refers to a hazard or unsafe practice which can result in personal injury or property damage.

CAUTION

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

CAUTION: This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

This Class B digital apparatus complies with Canadian ICES-003.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION — The appliance should be installed in a stable location.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

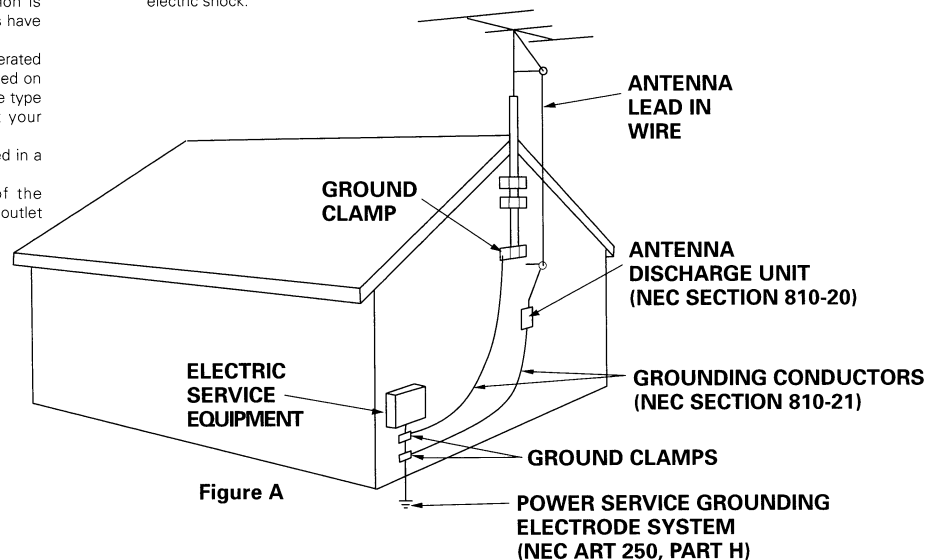


Figure A

NEC – NATIONAL ELECTRICAL CODE

**FEDERAL COMMUNICATIONS COMMISSION
DECLARATION OF CONFORMITY**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Product Name: Plasma Display

Model Number: PDP-502MX

Product Category: Class B Personal Computers & Peripherals

Responsible Party Name: PIONEER ELECTRONICS SERVICE, INC.

Address: P.O. BOX 1760, LONG BEACH, CA., 90801-1760 U.S.A.

Phone: (800)421-1625

For Business Customer URL <http://www.PioneerUSA.com>

Thank you very much for purchasing this PIONEER product. Before using your Plasma Display, please carefully read the "Safety Precautions" and these "Operating Instructions" so you will know how to operate the Plasma Display properly. Keep this manual in a safe place. You will find it useful in the future.

Notes on Installation Work:

This product is marketed assuming that it is installed by qualified personnel with enough skill and competence. Always have an installation specialist or your dealer install and set up the product. PIONEER cannot assume liabilities for damage caused by mistake in installation or mounting, misuse, modification or a natural disaster.

Note for Dealers:

After installation, be sure to deliver this manual to the customer and explain to the customer how to handle the product.

Features

● Incorporation of high performance XGA wide plasma panel.

The XGA wide panel incorporates pioneering developments that have allowed realization of more than 2.5 times the data capacity of the VGA panel used at the TV broadcasting level until now*. With a definition of 1280 pixels horizontal and 768 pixels vertical, the XGA wide panel provides unsurpassed reproduction of a wide range of images from DVD players, peripheral components, and computers.

* When the screen aspect is 4:3

VGA: 640 pixels x 480 pixels

XGA: 1024 pixels x 768 pixels

● Achievement of XGA class high level luminance

Even in the case of luminance, which is difficult to keep consistent with the level of definition, using originally developed PIONEER technology for optimization, top level luminance has been achieved at this definition.

● Realization of thin 3-27/32 inches (9.8 cm) unit depth while retaining a maximum class level 50 inch screen

As well as producing a 50 inch wide screen, which has been difficult to do with a direct view CRT, the extremely thin 3-27/32 inches (9.8 cm) unit depth size opens up completely new possibilities to how viewing rooms may be designed.

● Unlimited placement possibilities

Designed to be attached to a wall, set on a table top stand or placed on a floor rack, this unit can be installed many ways.

● Optional line (sold separately)

(For details, please consult the dealer where this unit was purchased.)

- 1 Table top stand : Stand designed specifically for PDP-502MX table top placement.
- 2 Wall installation unit : Wall installation bracket designed as a wall interface for securing the unit to various types of wall construction formats.

CAUTION:

This product may be used only with Model PDK-5001 stands. Use with other stands may result in instability causing possible injury.

- 3 Speaker system designed specifically for plasma displays (width: 2-29/32 inches (7.4 cm))
: With the adoption of a vertical twin system designed with a 31/32 inch (2.5 cm) domed conical tweeter in the center and newly developed 1-25/32 inch (4.5 cm) wide oval shaped units arranged vertically, sound field orientation has been greatly improved. Although the cabinet depth is only 2-29/32 inches (7.4 cm), a rich, dynamic sound is produced. (When speakers are attached, the operation panel on this unit is not operable.)

● Designed to conserve energy

This product has been designed to minimize power consumption when the power is in standby. The value of the power consumption in standby mode is 0.6 W.

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Before Proceeding

How to Use This Manual

This manual is set up to follow the course of actions and operations in the order that would seem most logical for someone setting up this unit.

Once the unit has been taken out of the box, and it has been confirmed that all the parts have been received, it may be beneficial to look over the section "Part Names and Functions" starting on page 4 to become acquainted with the plasma monitor and remote control unit, as their respective buttons and controls will be referred to throughout this manual.

The section "Installation and Connections" starting on page 8 covers all the necessary points regarding installation of the plasma display and connections to a wide variety of components.

The section "Setting Up the System" starting on page 18 covers the necessary on-screen menu settings to establish correct linkage between the plasma display and connected components. Depending on the connections made, this section may or not be necessary.

The remainder of the sections in this manual is dedicated to the basic operations associated with selecting a source component up to the more complex operations associated with adjusting the plasma display picture to match the requirements of specific components and personal preferences.

About operations in this manual

Operations in this manual are outlined in step by step numbered procedures. Most of the procedures are written in reference to the remote control unit unless the button or control is only present on the main unit.

However, if a button or control on the main unit has the same or similar name as that on the remote control unit, that button can be used when performing operations.

The following example is an actual operation that shows how one might set the vertical position of the screen. The screens shown at each step are provided as a visual guide to confirm that the procedure is proceeding as it should. Please familiarize yourself with this process before continuing on with the rest of this manual.

1 Press MENU to display the menu screen.

2 Press ▲/▼ to select SCREEN.

```
MAIN MENU
PICTURE      H. POSI. : 0
▶SCREEN      V. POSI. : 0
ALL RESET
POWER SAVE  V. SIZE  : 0
SET UP      CLK FRQ  : ---
              CLK PHS : ---
              RESET
MENU:MENU OFF
▲▼ ▶:SELECT
```

3 Press ▶.

```
MAIN MENU
PICTURE      ▶H. POSI. : 0
SCREEN       V. POSI. : 0
ALL RESET
POWER SAVE  V. SIZE  : 0
SET UP      CLK FRQ  : ---
              CLK PHS : ---
              RESET
MENU:MENU OFF
▲▼◀ :SELECT SET:ADJUST
```

4 Press ▲/▼ to select the item to be adjusted.

```
MAIN MENU
PICTURE      H. POSI. : 0
SCREEN       ▶V. POSI. : 0
ALL RESET
POWER SAVE  V. SIZE  : 0
SET UP      CLK FRQ  : ---
              CLK PHS : ---
              RESET
MENU:MENU OFF
▲▼◀ :SELECT SET:ADJUST
```

5 Press SET to display the adjustment screen for the selected item.

```
SCREEN

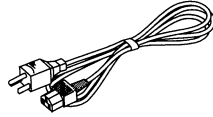
V. POSITION    0
▲▼:ADJUST    SET:EXIT
```

6 Press ▲/▼ to adjust the value.

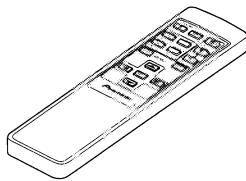
Checking supplied accessories

Check that the following accessories were supplied.

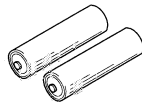
① Power cord



② Remote control unit



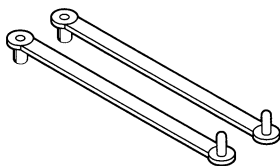
③ AA (R6) batteries x 2



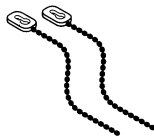
④ Cleaning cloth (for wiping front panel)



⑤ Speed clamp x 2



⑥ Bead band x 2

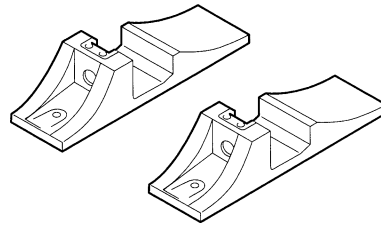


⑦ Pin/BNC conversion adaptor x 1

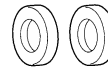


- Operating Instructions
- Warranty

⑧ Display stand x 2



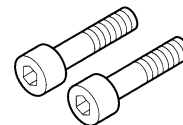
⑨ Washer (large) x 2



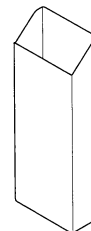
⑩ Washer (small) x 2



⑪ Hex hole bolt x 2



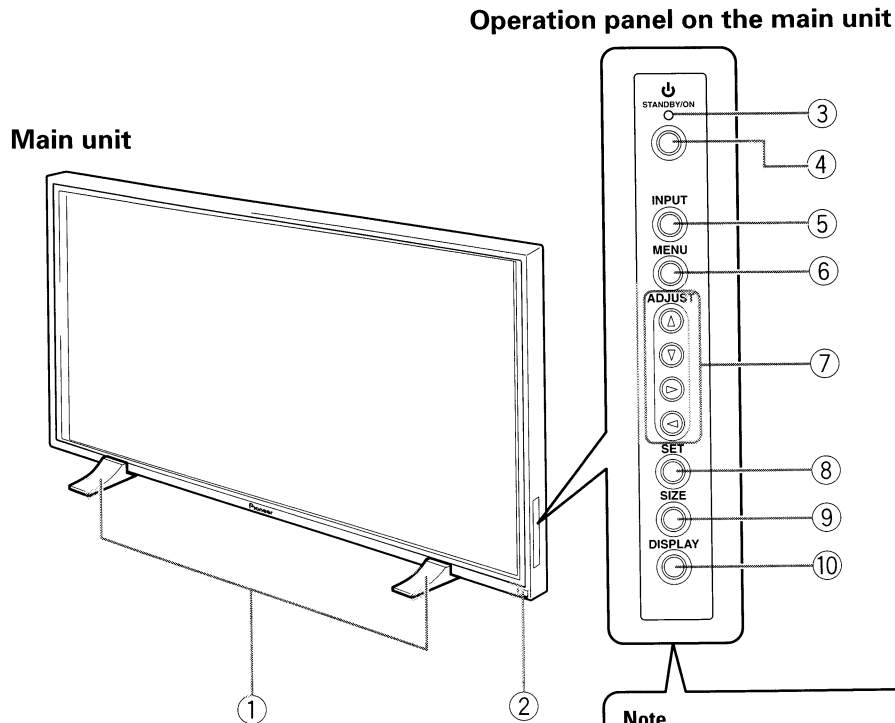
⑫ Remote control unit case



Use as a holder for the remote control unit. When attaching to the rear of the main unit, be careful not to cover the vents.

Part Names and Functions

Main unit



Operation panel on the main unit

Main unit

Note
When optional speakers have been connected, the operation panel on the main unit will not be operable.

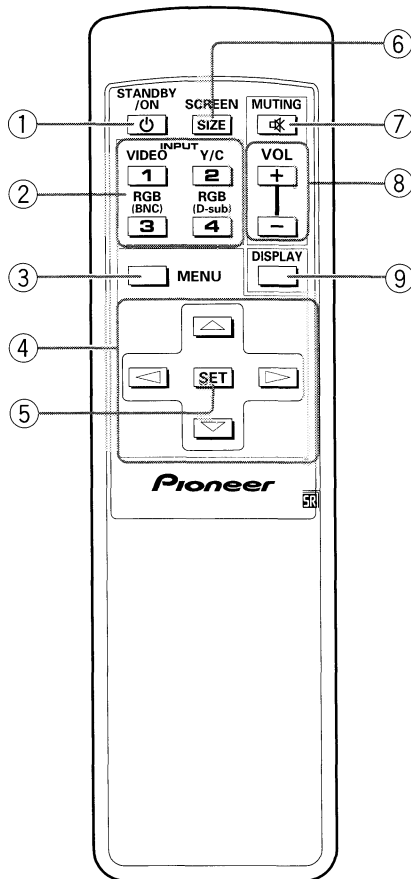
Main unit

- ① **Display stand**
- ② **Remote control sensor**
Point the remote control toward the remote sensor to operate the unit (page 31).

Operation panel on the main unit


- ③ **STANDBY/ON indicator**
This indicator is red during standby mode, and turns to green when the unit is in the operation mode (page 20).
- ④ **STANDBY/ON button**
Press to put the display in operation or standby mode (page 20).
- ⑤ **INPUT button**
Press to select input (page 20).
- ⑥ **MENU button**
Press to open and close the on-screen menu (pages 18 to 30).
- ⑦ **ADJUST (▲/▼/▶/◀) buttons**
Use to navigate menu screens and to adjust various settings on the unit.
Usage of cursor buttons within operations is clearly indicated in the on-screen display (pages 18 to 30).
- ⑧ **SET button**
Press to adjust or enter various settings on the unit (pages 18 to 30).
- ⑨ **SIZE button**
Press to manually select the screen size (page 22).
- ⑩ **DISPLAY button**
Press to view the unit's current input and setup mode (page 21).

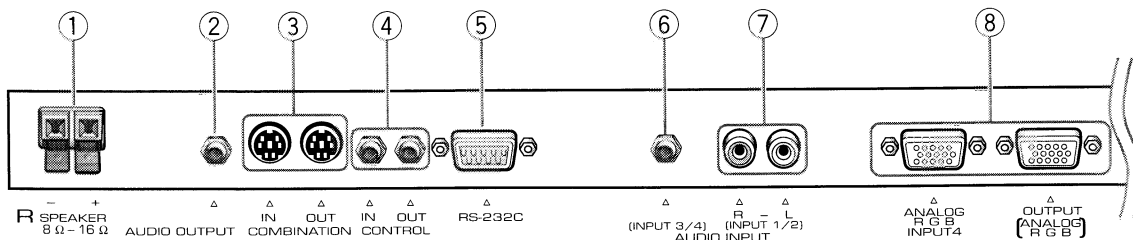
Remote control unit



- ① **STANDBY/ON button**
Press to put the unit in operation or standby mode (page 20).
- ② **INPUT buttons**
Use to select the input (page 20).
- ③ **MENU button**
Press to open and close the on-screen menu (pages 18 to 30).
- ④ **ADJUST (▲/▼/▶/◀) buttons**
Use to navigate menu screens and to adjust various settings on the unit.
Usage of cursor buttons within operations is clearly indicated at the bottom the on-screen menu display (pages 18 to 30).
- ⑤ **SET button**
Press to adjust or enter various settings on the unit (pages 18 to 30).
- ⑥ **SCREEN SIZE button**
Press to manually select the screen size (page 22).
- ⑦ **MUTING button**
Press to mute the volume (page 21).
- ⑧ **VOL (+/-) buttons**
Use to adjust the volume (page 21).
- ⑨ **DISPLAY button**
Press to view the unit's current input and setup mode (page 21).

Connection panel

On this unit there are 4 input system terminals and 2 output system terminals.
There are also CONTROL terminals for connection of PIONEER components with the  mark.
For details regarding a specific connection format, refer to the page written in parenthesis.



① SPEAKER (R) terminal

For connection of an external right speaker.
Connect a speaker whose impedance is 8 - 16 Ω
(page 15).


② AUDIO OUTPUT (Stereo mini jack)

Use to output the audio of the selected source
component connected to this unit to an AV amplifier
or similar component (page 15).

③ COMBINATION IN/OUT DO NOT MAKE ANY CONNECTIONS TO THESE TERMINALS.

These terminals are used in the factory setup.

④ CONTROL IN/OUT

For connection of PIONEER components that bear the  mark. Making CONTROL connection enables
control of this unit as a component in a system
(page 16).

⑤ RS-232C DO NOT MAKE ANY CONNECTIONS TO THIS TERMINAL.

This terminal is used in the factory setup.

⑥ AUDIO INPUT (Stereo mini jack)

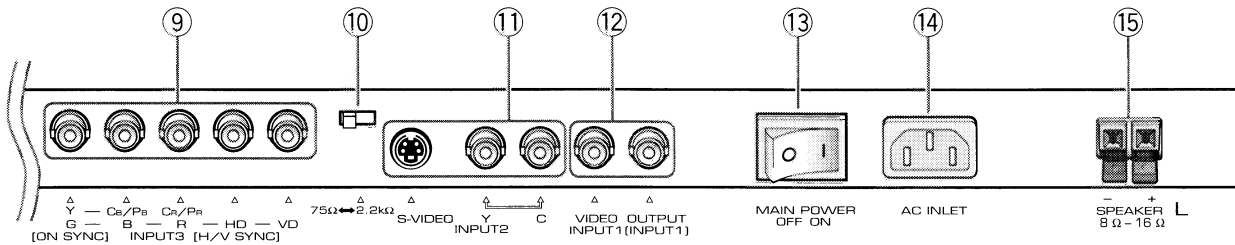
Use to obtain sound when INPUT3 or INPUT4 is
selected.
Connect the audio output jack of components
connected to INPUT3 or INPUT4 to this unit (page 15).

⑦ AUDIO INPUT (Pin jack)

Use to obtain sound when INPUT1 or INPUT2 is
selected.
Connect the audio output jack of components
connected to INPUT1 or INPUT2 to this unit (page 15).
NOTE: The left audio channel (L) jack is not
compatible with monaural input sources.

⑧ INPUT4

For connection of a personal computer (PC) or similar
component. Make sure that the connection made
corresponds to the format of the signal output from
the connected component.
Use the INPUT4 OUTPUT terminal to output the video
signal to an external monitor or other component.
Note: The video signal will not be output from the
INPUT4 OUTPUT terminal when the main power of
this unit is off or in standby mode.
(pages 11 to 13)



9 INPUT3

For connection of components that have RGB or component output jacks such as a personal computer, DVD player, or external RGB decoder (pages 11 to 13).

10 Synchronizing signal impedance selector switch

Depending on the connections made at INPUT3, it may be necessary to set this switch to match the output impedance of the connected component's synchronization signal.

When the output impedance of the component's synchronization signal is above 75 Ω, set this switch to the 2.2 kΩ position (pages 12 and 13).

11 INPUT2

For connection of components that have an S-video output jack or Y/C separate video output jacks such as a video deck, video camera, laser disc player, or DVD player.

Note: Do not use both the S-VIDEO jack and the BNC jacks in parallel. Doing so may cause this unit to malfunction or become damaged.

(page 10)

12 INPUT1

For connection of components that have a composite video output jack such as a video deck, video camera, laser disc player, or DVD player.

Use the INPUT1 OUTPUT jack to output the video signal to an external monitor or other component.

Note: The video signal will not be output from the INPUT1 OUTPUT jack when the main power of this unit is off or in standby mode.

(page 10)

13 MAIN POWER switch

Use to switch the main power of the unit on and off.

14 AC INLET

Use to connect the supplied power cord to an AC outlet (page 16).

15 SPEAKER (L) terminal

For connection of an external left speaker. Connect a speaker that has an impedance of 8 -16 Ω.

(page 15)

Installation and Connections

English

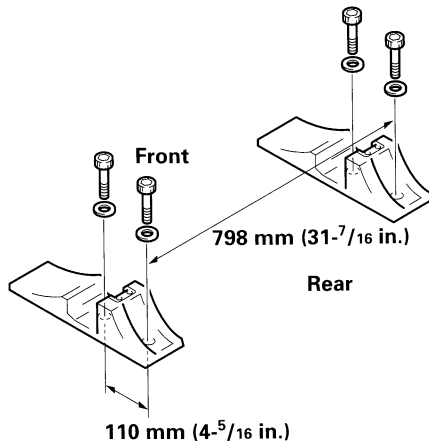
Installation of the unit

Installation using the supplied display stand

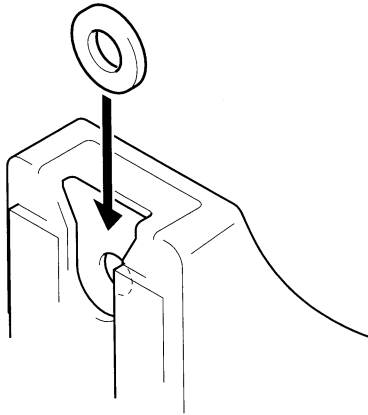
Be sure to fix the supplied stand to the installation surface.

Use commercially available M8 bolts that are 25 mm longer than the thickness of the installation surface.

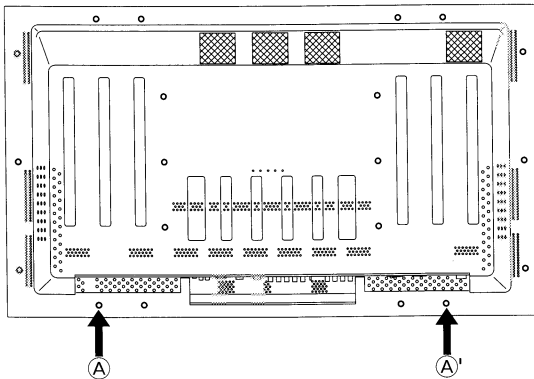
- 1 Fix the supplied stand to the installation surface at each of the 4 prepared holes using commercially available M8 bolts .



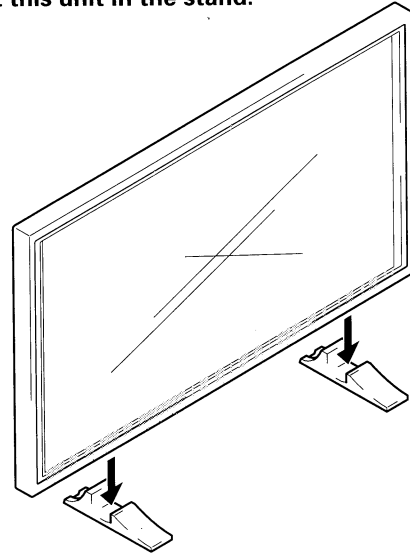
- 2 Insert the supplied washer (large) into the stand.



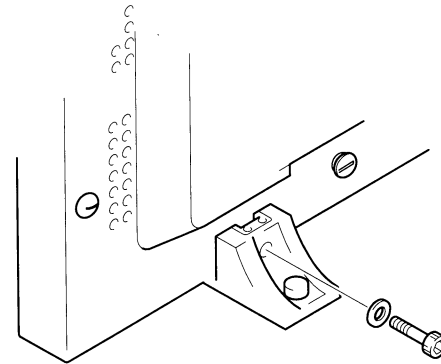
- 3 Take off the hole rivets (A) and (A') of this unit using a screwdriver or a coin.



- 4 Set this unit in the stand.



- 5 Fix this unit using the supplied washer and bolt.



Use a 6 mm hex wrench to bolt them.

CAUTION

Because this unit weighs about 88 lbs 3 oz (about 40 kg) and has little depth making it unstable, please use 2 people or more when packing, carrying or installing.

Installation and Connections

Installation using the optional PIONEER stand or installation bracket

- Please be sure to request installation or mounting of this unit or the installation bracket by an installation specialist or the dealer where purchased.
- When installing, be sure to use the bolts provided with the stand or installation bracket.
- For details concerning installation, please refer to the instruction manual provided with the stand or installation bracket.

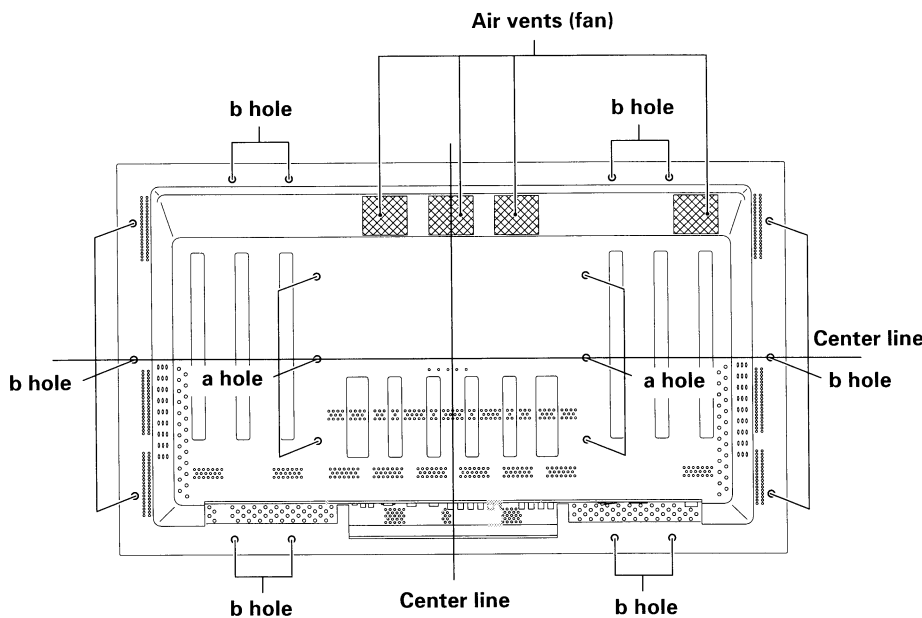
Installation using accessories other than the PIONEER stand or installation bracket (sold separately)

- When possible, please install using parts and accessories manufactured by PIONEER. PIONEER will not be held responsible for accident or damage caused by the use of parts and accessories manufactured by other companies.
- For custom installation, please consult the dealer where the unit was purchased, or a qualified installer.

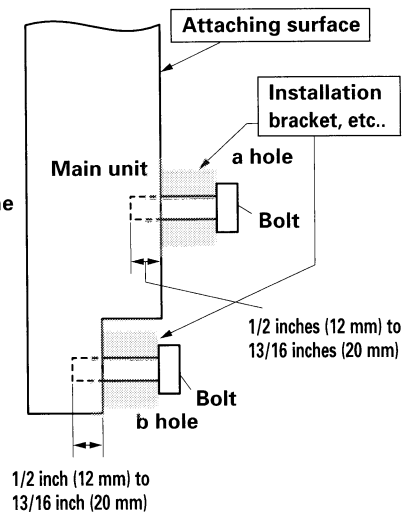
Wall-mount installation of the unit

This unit has been designed with bolt holes for wall-mount installation, etc.. The installation holes that can be used are shown in the diagram below. (Hole rivets can be removed by turning with a screwdriver, coin or similar tool.)

- Be sure to attach in 4 or more locations above and below, left and right of the center line.
- Use bolts that are long enough to be inserted 1/2 inch (12 mm) to 13/16 inch (20 mm) into the main unit from the attaching surface for both a holes and b holes. Refer to the side view diagram below.
- As this unit is constructed with glass, be sure to install it on a flat, unwarped surface.



Rear view diagram



Side view diagram

CAUTION

To avoid malfunction, overheating of this unit, and possible fire hazard, make sure that the vents on the main unit are not blocked when installing. Also, as hot air is expelled from the air vents, be careful of deterioration and dirt build up on rear surface wall, etc..

CAUTION

Please be sure to use an M8 (Pitch = 1.25 mm) bolt. (Only this size bolt can be used.)

CAUTION

Because this unit weighs about 88 lbs 3 oz (about 40 kg) and has little depth making it unstable, please use 2 people or more when packing, carrying or installing.

CAUTION

This unit incorporates a thin design. To ensure safety if vibrated or shaken, please be sure to take measures to prevent the unit from tipping over.

About the input jacks on this unit

Connect the output jacks of components to the input jacks of this unit following the list below (pages 10 to 14).

Input of this unit Connected component and signals	INPUT1	INPUT2	INPUT3*1	INPUT4*1
AV component				
Composite video	○			
S video		○		
Y/C separate video		○		
Component video			○	○
RGB			○	○
Personal computer (PC)				
Composite video	○*3			
S video		○*3		
RGB			○	○*2

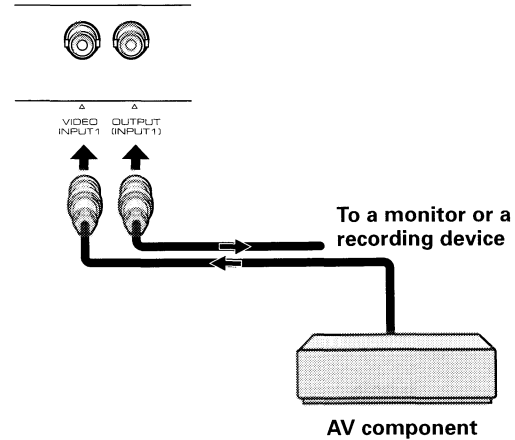
- *1 Although INPUT3/INPUT4 are compatible with various kinds of signals, setup using the on-screen menu is necessary after connections are made in order match the characteristics of the source component (pages 18 and 19).
- *2 INPUT4 is compatible with Microsoft's Plug & Play (VESA DDC 1/2B).
- *3 Depending on the video output board of the computer, this type of connection may not be possible.

Connection to INPUT1

Connect an AV component that has a video output jack to the INPUT1 jack on the main unit. The OUTPUT [INPUT1] jack on the main unit can be used to output the video signal to a separate monitor, recording device or other component with video input capability.

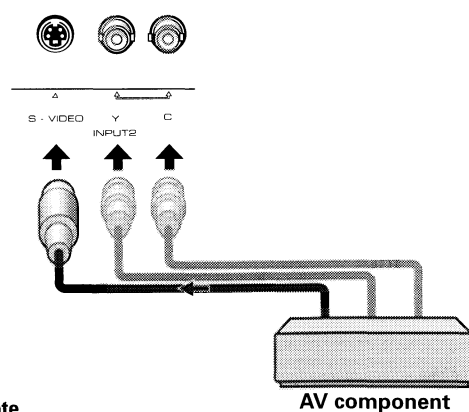
Note

A video signal will not be output from the OUTPUT [INPUT1] jack when the main power of this unit is off or in standby mode.



Connection to INPUT2

Connect an AV component that has S-video or Y/C separate video output jacks to the S-VIDEO or Y/C input jacks on this unit. (The INPUT2 S-VIDEO jack is compatible with S2 output signals.)



Note

Do not use both the S-VIDEO jack and the BNC jacks in parallel. Doing so may cause this unit to malfunction or become damaged.

Signals to the INPUT1 and INPUT2 jacks are all compatible with the following TV systems: NTSC, PAL, SECAM and 4.43NTSC. For details, please refer to "Setting the regional TV system format" on page 27.

Connection to INPUT3 and INPUT4

Various components can be connected to the INPUT3 and INPUT4 jacks. After connections are made, on-screen setup is necessary to match the characteristics of the connected component. Please see pages 18 and 19 for on-screen setup after connection.

INPUT3 jack	[ON SYNC]	B	R	[H/V SYNC]	VD
	G			HD	
Output source	Y	Cb/Pb	Cr/Pr	—	—
Video component/ personal computer (PC) with RGB output	○ G ON SYNC	○ B	○ R	✗	✗
	○ G	○ B	○ R	○ H/V SYNC	✗
	○ G	○ B	○ R	○ HD	○ VD
Video component with component video output	○ Y	○ (Cb/Pb)	○ (Cr/Pr)	✗	✗

✗ : Do not connect anything. ○ : Connect to this jack.

Note

Components compatible with INPUT3 are also compatible with INPUT4.

When making connections to INPUT4, please refer to supplement 3 on page 38.

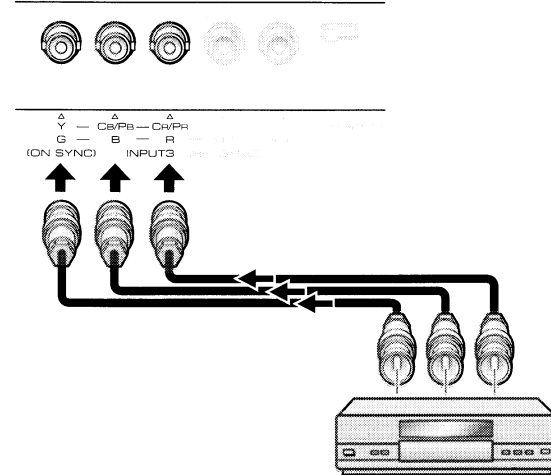
For the screen sizes and input signals that INPUT3 and INPUT4 are compatible with, please refer to supplements 1 to 2 (pages 36 to 37).

Connection to AV components

Connection to AV component that has component video jacks

Make component video connections for AV components such as DVD and LD players or similar components with component video output capability.

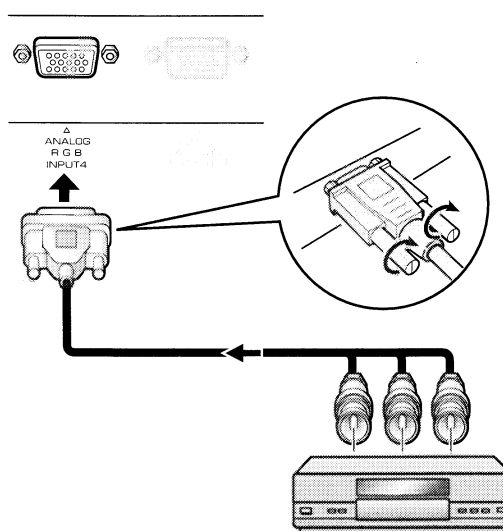
When connecting to INPUT3



On-screen setup is necessary after connection. Please see page 18.

INPUT3 jacks are all BNC jacks. If necessary, use pin/BNC conversion adapters (1 (one) included) to make connections.

When connecting to INPUT4

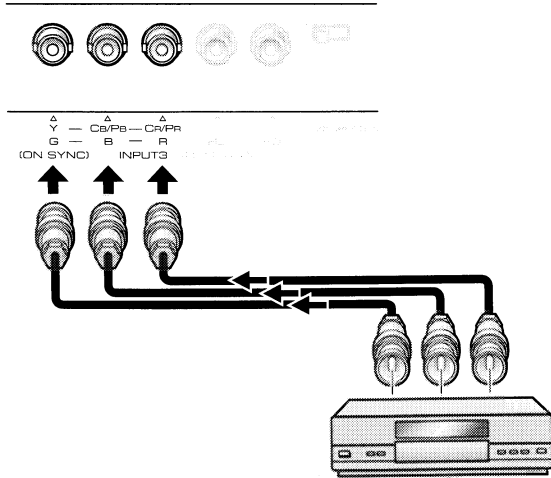


On-screen setup is necessary after connection. Please see page 18.

Connection of G ON SYNC analog RGB source

Make G ON SYNC connections for an AV component with output that has the synchronization signal layered on top of the green signal.

When connecting to INPUT3

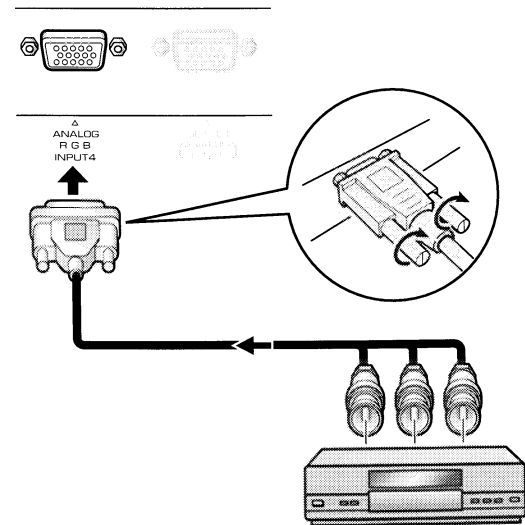


On screen setup is necessary after connection. Please see pages 18 and 19.

Notes

- When making G ON SYNC connections, do not make any connections to the VD or HD jacks. If connections are made, the picture may not be displayed normally.
- When using a computer connected by the G ON SYNC connection, on-screen adjustment for G ON SYNC is necessary (pages 18 and 19). Please read your PC's instruction manual throughly.

When connecting to INPUT4

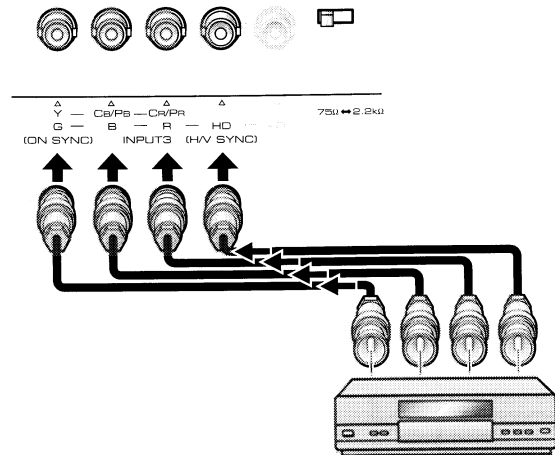


On screen setup is necessary after connection. Please see pages 18 and 19.

Connection of composite SYNC analog RGB source

Make composite SYNC connections for a component with output that has the vertical synchronization signal layered on top of the horizontal synchronization signal.

When connecting to INPUT3



When using INPUT3, set the impedance selector switch to match the output impedance of the connected component's synchronization signal.

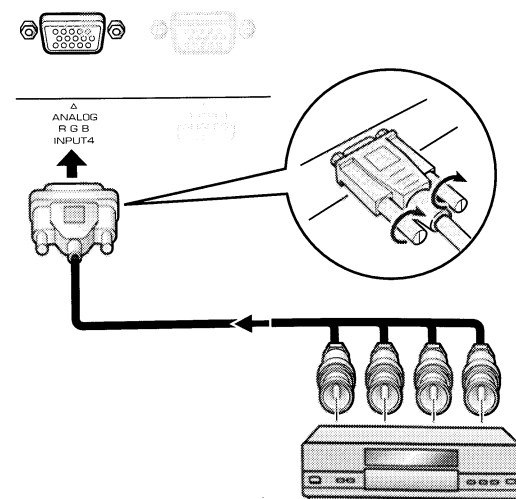
When the output impedance of the component's synchronization signal is above 75 Ω , set this switch to the 2.2 k Ω position.

On-screen setup is necessary after connection. Please see pages 18 and 19.

Notes

- When making composite SYNC connections, do not connect anything to the VD jack. If connected to, the picture may not be displayed properly.
- On some types of Macintosh® components, G ON SYNC and composite SYNC are both output. With this type of component, please connect using the G ON SYNC connection (as shown left).

When connecting to INPUT4



On-screen setup is necessary after connection. Please see pages 18 and 19.

Connection to a personal computer

Connection method differs depending on the computer type. When connecting, please thoroughly read the computer's instruction manual.

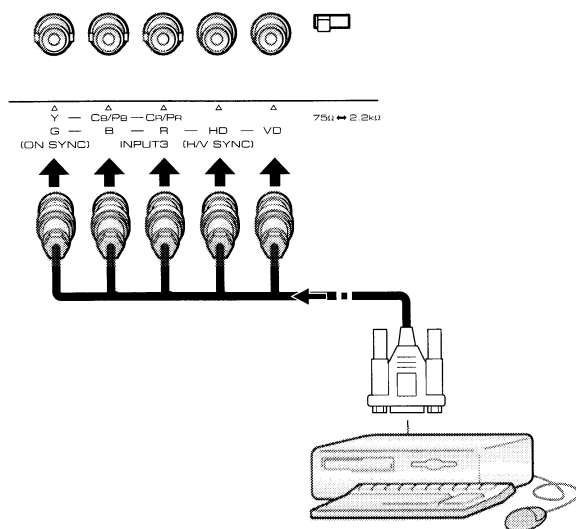
Before making connections, be sure to make sure that the personal computer's power and this unit's main power is off.

For the PC input signals and screen sizes that this unit is compatible with, please refer to supplement 2 (page 37).

Connection of separate SYNC analog RGB source

Make separate SYNC connections for a component that has RGB output separated into 5 output signals: green, blue, red, horizontal synchronization signal, and vertical synchronization signal.

When connecting to INPUT3

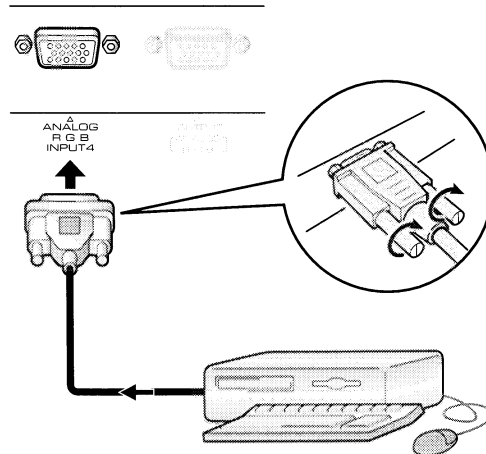


When using INPUT3, set the impedance selector switch to match the output impedance of the connected component's synchronization signal.

When the output impedance of the component's synchronization signal is above 75 Ω, set this switch to the 2.2 kΩ position.

On-screen setup is necessary after connection. Please see pages 18 and 19.

When connecting to INPUT4



Connect the cable corresponding to the shape of the input terminal on this unit and the personal computer's output terminal.

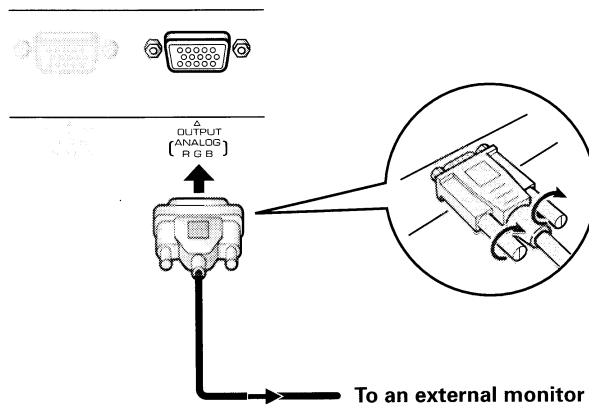
Secure by tightening the terminal screws on both units.

After connecting, on-screen setup is necessary. Please see pages 18 and 19.

Note

Depending on the type of computer model being connected, a conversion connector or adapter etc. provided with the computer or sold separately may be necessary. For details, please read your PC's instruction manual or consult the maker or nearest dealer of your computer.

When connecting to INPUT4 (OUTPUT)



With this unit, it is possible to output the video signal to an external monitor or other component from the INPUT4 OUTPUT terminal.

Note

A video signal will not be output from the INPUT4 OUTPUT terminal when the main power of this unit is off or in standby.

About DTV set top box connection

To ensure proper connection, please carefully read the instruction manual supplied with the DTV set top box.

The set top box output signals that this unit is compatible with are as follows.

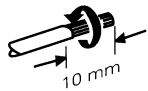
Signal type	Dot x Line, Scanning (aspect)	Signal Format	Jacks where connection is possible			
			INPUT1	INPUT2	INPUT3	INPUT4
HDTV	1920 x 1080 i (16 : 9)	Component			⊙	⊙
	1920 x 1080 p (16 : 9) 1280 x 720 p (16 : 9)	RGB			⊙	⊙
SDTV	704 x 480 i (16 : 9)	Composite	⊙			
	704 x 480 i (4 : 3)	S Video		⊙		
	640 x 480 i (4 : 3)	Component			⊙	⊙
		RGB			⊙	⊙
	704 x 480 p (16 : 9)	Component			⊙	⊙
	704 x 480 p (4 : 3) 640 x 480 p (4 : 3)	RGB			⊙	⊙

Audio connections

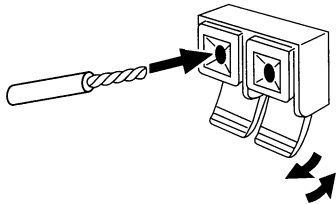
Before making connections, be sure to check that the audio component's power and the unit's main power is off.

Connecting the speakers

This unit is equipped with speaker output jacks for connection to the speaker system (not supplied) specially designed for use with this unit. Refer to the illustrations below when making connections to the speaker terminals on this unit.



Twist exposed wire strands together.



Push tab to the open position, and insert the wire. Then, close tab firmly to secure the wire in place.

Note

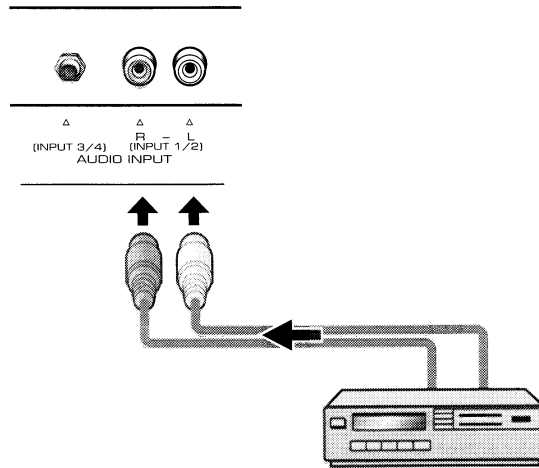
When making speaker connections, be sure to match the polarities (+ and -) of the speaker terminals on this unit and the corresponding terminals on the speakers. If the polarity is reversed, the sound will be unnatural and lack bass.

Making connections to the audio inputs on this unit

This unit features two audio inputs and one audio output. The following chart shows the video inputs and the corresponding audio input jacks.

Video input	Audio input jacks	Sound output
INPUT1	Pin jacks	Sound of the selected video input is output from the
INPUT2	(L/R)	
INPUT3	Stereo mini jack	<ul style="list-style-type: none"> • SPEAKER terminals • Stereo mini jacks (L/R).
INPUT4	(L/R)	

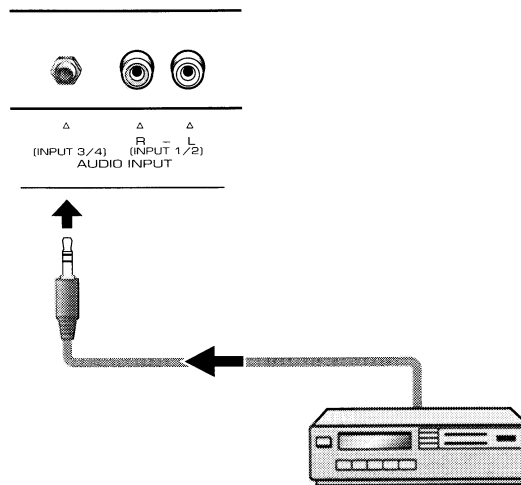
Audio connection for component connected to INPUT1 or INPUT2



Audio input to the AUDIO INPUT jacks (pin jacks (L/R)) is possible for a component connected to either INPUT1 or INPUT2.

Sound is output from both the AUDIO OUTPUT jacks (stereo mini jack) and the SPEAKER jacks according to the video input selection.

Audio connection for component connected to INPUT3 or INPUT4



Audio input to the AUDIO INPUT jacks (stereo mini jack) is possible for a component connected to either INPUT3 or INPUT4.

Sound is output from both the AUDIO OUTPUT jacks (stereo mini jack) and the SPEAKER jacks according to the video input selection.

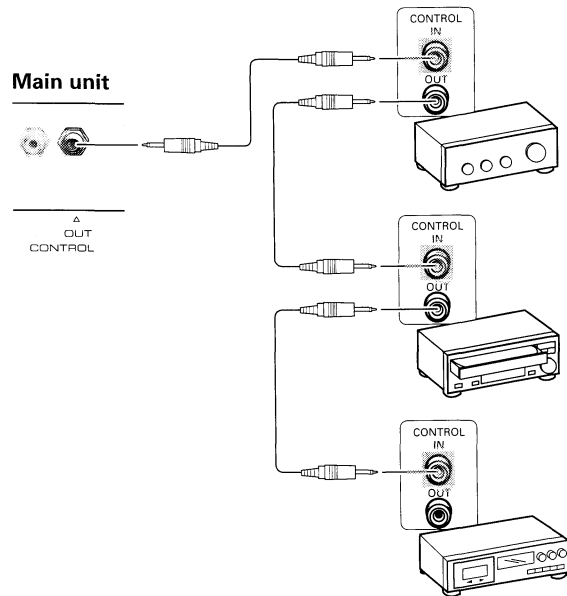
Control cord connection

When control cord connections are made, remote control operation of connected PIONEER components that bear the SR logo mark is done through the remote sensor on this unit.

When the connection is made to the CONTROL IN jack on this unit, the remote sensor of that component will no longer receive signals. Point the remote control unit of the connected component at the remote control sensor on this unit to control.

Notes

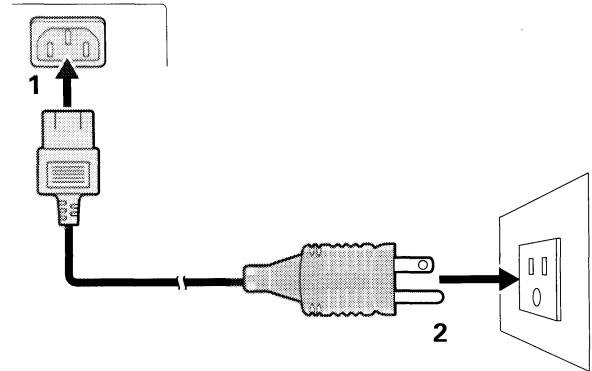
- Make sure the power is turned off when making connections.
- Please complete all component connections before making control cord connections.



The control cables (not supplied) are monaural cables with mini plugs (no resistance).

Power cord connection

Connect the power cord after all component connections have been completed.



- 1 Connect the power cord to this unit.
- 2 Plug the power cord into a power outlet.

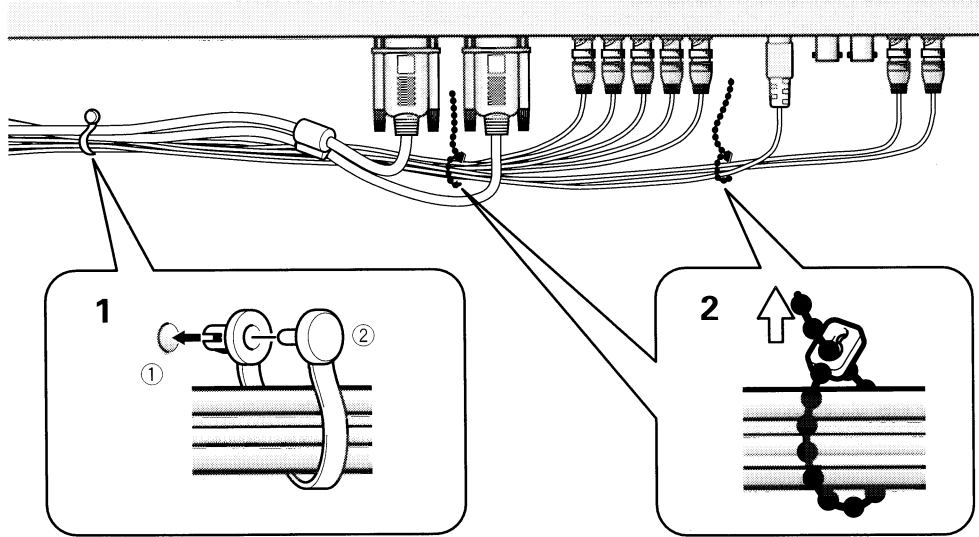
CAUTION

- Use only the power cord provided.
- Do not use a power supply voltage other than that indicated (AC 100 - 120 V, 50/60 Hz) as this may cause fire or electric shock.
- For the plasma display, a three-core power cord with a ground terminal is used for efficiency protection. Always be sure to connect the power cord to a three-pronged grounded outlet and make sure that the cord is properly grounded. If you use a power source converter plug, use an outlet with a ground terminal and screw down the ground line.

How to route cables

Speed clamps and bead bands are included with this unit for bunching cables together. Once components are connected, follow the following steps to route cables.

* As viewed from the rear of the display.



1 Organize cables together using the provided speed clamps.

Insert ① into an appropriate hole on the rear of the unit, then snap ② into the back of ① to fix the clamp.

Speed clamps are designed to be difficult to undo once in place. Please attach carefully.

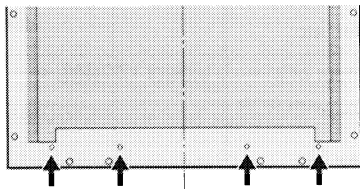
2 Bunch separated cables together and secure them with the provided bead bands.

Note

Cables can be routed to the right or left.

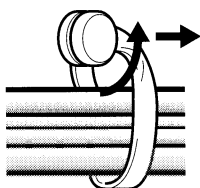
To attach the speed clamps to the main unit

Connect the speed clamps using the 4 holes marked with • below, depending on the situation.



To remove speed clamps

Using pliers, twist the clamp 90° and pull it outward. In some cases the clamp may have deteriorated over time and may be damaged when removed.




Setting Up the System

Setup after connection

After components have been connected to INPUT3 or INPUT4, on-screen setup is necessary. Follow the procedure described below and make settings as they apply to the type of components connected.

1 Switch MAIN POWER on the connection panel to the on position to turn on the unit's main power.

The STANDBY/ON indicator lights red.

2 Press  STANDBY/ON to put the unit in the operation mode.

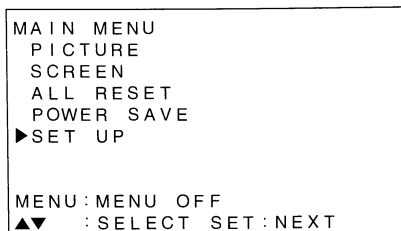
The STANDBY/ON indicator turns green.

3 Select INPUT3 or INPUT4.

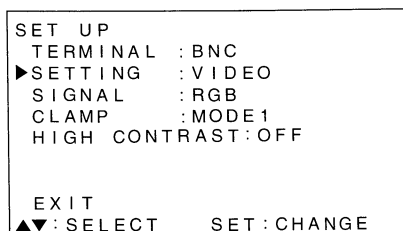
4 Press MENU to display the menu screen.

The menu screen appears.

5 Press $\blacktriangle/\blacktriangledown$ to select SET UP, and press SET.



6 Press $\blacktriangle/\blacktriangledown$ to select SETTING.



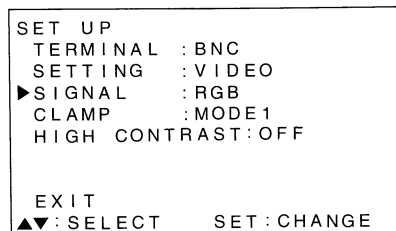
7 Press SET to select either "PC" or "VIDEO".

When a personal computer is connected, set to "PC".
When a component other than a personal computer is connected, set to "VIDEO".

Note

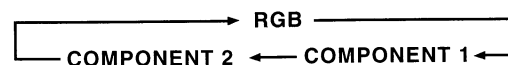
Steps 6 to 7 are necessary when inputting a signal of horizontal frequency 31.5 kHz/vertical frequency 60 Hz. For signals of other frequencies, settings are done automatically, and therefore cannot be performed.

8 Press $\blacktriangle/\blacktriangledown$ to select SIGNAL.



9 Press SET repeatedly to select the input signal format.

Selection will change as follows each time SET is pressed.



The table below shows what settings are appropriate and available for the type of connections made.

10 When the setup is completed, press MENU to exit the menu screen.

Notes

- Make this setup for each input (INPUT3 and INPUT4).
- When selecting a PC signal or when SETTING is set to "PC", "COMPONENT" cannot be selected.
- Please refer to page 19 for details concerning CLAMP (G ON SYNC) setup.

Set SETTING and SIGNAL as follows.

Connected component \ SET UP	SETTING	SIGNAL
Component video output of a DTV set top box	VIDEO	COMPONENT 1*
Component video output of a DVD player, etc.	VIDEO	COMPONENT 2*
RGB video output of a video deck etc., with RGB output	VIDEO	RGB
RGB video output of a PC	PC	RGB (Fixed to RGB when SETTING is set to "PC".)

* Select either COMPONENT 1 or 2 depending on which setting provides the most natural picture color for the component connected.

Note

When a DTV set top box is connected, please also refer to the instruction manual supplied with the set top box.

G ON SYNC setup (CLAMP)

The RGB video signal is normally composed of 5 signals: R, G, B, HD and VD. With G ON SYNC connection, however, the signal is composed of 3 signals: R, G (G, HD and VD combined) and B.

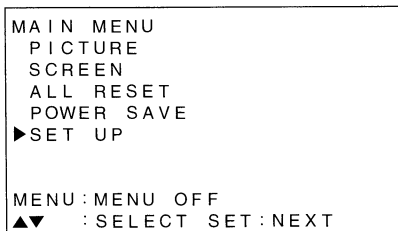
If the component being used is a model where G ON SYNC connection is carried out, on-screen setup is necessary.

Setup of G ON SYNC (CLAMP) connection

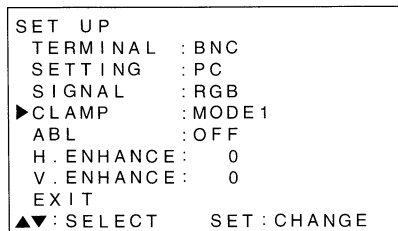
1 Press MENU to display the menu screen.

The menu screen appears.

2 Press ▲/▼ to select SET UP, and press SET.

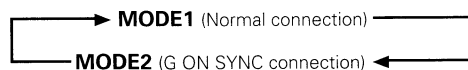


3 Press ▲/▼ to select CLAMP.



4 Press SET to select MODE2.

Mode selection will change as follows each time SET is pressed.



5 When the setup is completed, press MENU to exit the menu screen.

Notes

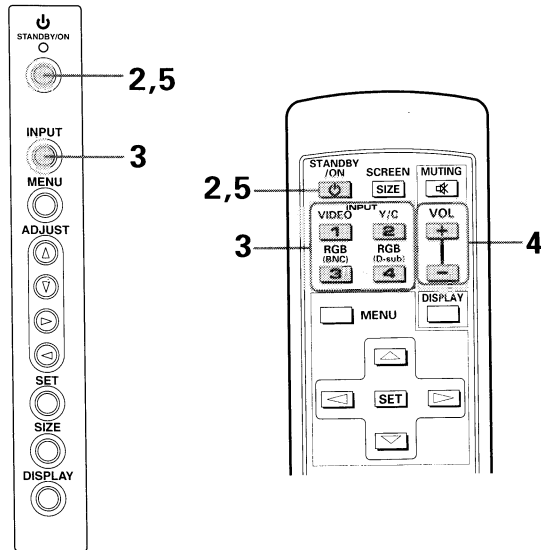
- Make this G ON SYNC setting for each applicable input (INPUT3 and INPUT4).
- When using this setup, be sure to carefully check the signal output of the component that you are using. For details, please refer to the instruction manual supplied with the component you are connecting.
- If the screen becomes bright and turns a greenish color, set CLAMP to MODE2.
- G ON SYNC connection is carried out on some Macintosh computers.

Selecting an input source

This section explains the basic operation of this unit. Outlined on the following pages is how to turn the main power on and off, put this unit in the operation or standby mode and how to select connected components.

Before you begin, make sure you have:

- Made connections between this unit and AV components or personal computer as described in the section "Installation and Connections" starting on page 8.
 - Set up the on-screen menu to input signals from components connected to INPUT3 and INPUT4 as described in the section "Setting Up the System" on page 18.
- If no connections are made to these terminals, on-screen setup is not necessary.



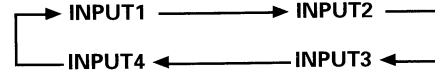
Operation panel of the main unit

Remote control unit

- 1 Switch MAIN POWER on the main unit to the on position to turn the main power on.**
The STANDBY/ON indicator lights red.
- 2 Press STANDBY/ON to put this unit in the operation mode.**
The STANDBY/ON indicator turns green.

- 3 Press INPUT on the remote control unit or the main unit to select the input.**

Input changes each time **INPUT** is pressed as follows.

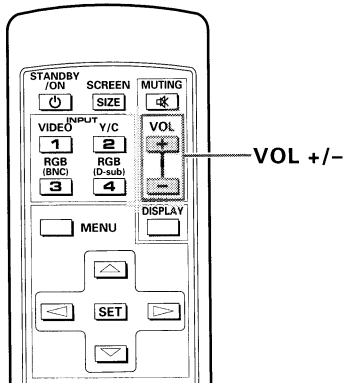


- Input cannot be changed when a menu screen is displayed.
 - When a signal from a personal computer is input, if the signal is not compatible with this unit, "OUT OF RANGE" will appear on the screen.
- 4 Use VOLUME +/- on the remote control unit to adjust the volume.**
If no audio connections are made to this unit, this step is not necessary.
 - 5 When viewing is finished, press STANDBY/ON to put the unit in standby mode.**
The STANDBY/ON indicator will blink and then remain lit (red) indicating that the standby mode is engaged. Operation is not possible while the STANDBY/ON indicator is blinking (red).
 - 6 Switch MAIN POWER on the main unit to the off position to turn the main power off.**

CAUTION

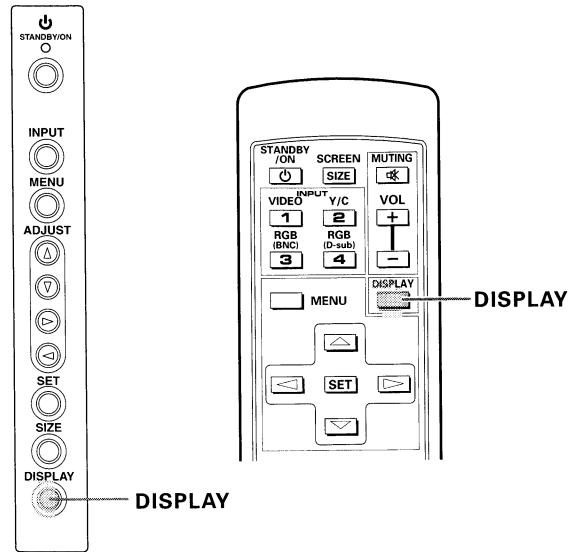
Please do not leave the same picture displayed on the screen for a long time. Doing so may cause a phenomenon known as "screen burn" which leaves a ghost, or residual, image of the picture on the screen.

To adjust the volume

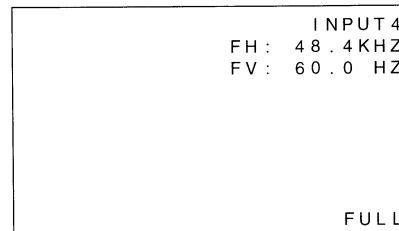
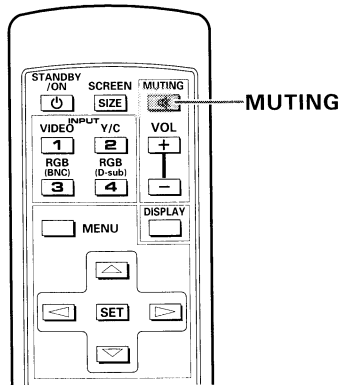


Use **VOL +** or **VOL -** to adjust the volume of the connected speakers.

To confirm display settings



To mute the sound



Press DISPLAY.

The currently selected input, screen size and vertical and horizontal frequencies will be displayed for approximately 3 seconds.

The vertical and horizontal frequencies are displayed only when INPUT3 or INPUT4 is selected.

Note

The displayed vertical and horizontal frequencies are approximations, and may be slightly different from the actual values.

Press MUTING on the remote control unit.

Press **MUTING** again to restore the sound.

Muting is automatically canceled about 8 minutes after the button is pressed, and the volume level is adjusted to the minimum level.

Press **VOL +** or **VOL -** to adjust the volume at a desired level.

Screen size selection

This unit incorporates screen modes of various height and width ratios. For optimal viewing, we recommend that you select the screen mode that best matches the video source that you are viewing. Although these modes are designed for full display of a picture on a wide screen, it is our hope that you make use of them with a full understanding of the manufacturer's intentions.

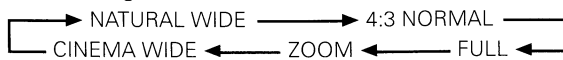
Changing the screen size

The size of the picture or the picture's range projected on the screen can be changed between 5 screen sizes described in the table on this page.

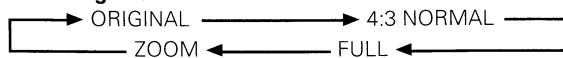
Press SCREEN SIZE to select the size.

The screen size changes each time **SCREEN SIZE** on the remote control, or **SIZE** on the unit is pressed as follows.

For video signals



For PC signals



(For screen sizes when the video signal of a personal computer is input, please see the personal computer input signal correspondence chart on page 37.)

Notes

- When the NATURAL WIDE, CINEMA WIDE, ZOOM, or FULL setting is used to display a non-wide screen 4:3 picture fully on a wide screen, a portion of the picture may be cut off or appear deformed.
- Please note that when this unit is used for business or public viewing purposes and the CINEMA WIDE mode or ZOOM screen modes are used to compress or stretch the screen picture, this may violate the rights of the author protected under copyright law.

Moving the screen position upward or downward

When a vista size movie etc., is viewed at the CINEMA WIDE or ZOOM setting, the image may not be centered on the screen, and may extend past the edge of the screen.

In this case, adjust the screen to an clearly viewable position using ▲/▼.

During personal computer input (1280 x 1024/60Hz only), even when the ZOOM setting is selected, the position of the screen can be adjusted by using ▲/▼.

During video signal input

How the picture looks	
<p>NATURAL WIDE</p>	Suitable for when viewing news or sports programs. Movies or sports programs can be viewed with an expansive powerful image.
<p>4:3 NORMAL</p>	Suitable for when viewing news or sit coms. The video software can be viewed in its original screen frame size. (To prevent screen burn on this unit, the displayed position of the screen frame will be slightly different each time the power is turned on.)
<p>FULL</p>	Suitable for wide screen images (squeeze).
<p>ZOOM</p>	Mainly suitable for viewing Cinemascope size and other such movie images. Provides a more expansive, powerful image.
<p>CINEMA WIDE</p>	Mainly suitable for viewing Vista size and other such movie images. Provides a more expansive, powerful image. This screen size is convenient when viewing a Cinemascope size image that has subtitles.

Automatic selection of screen size according to input signal

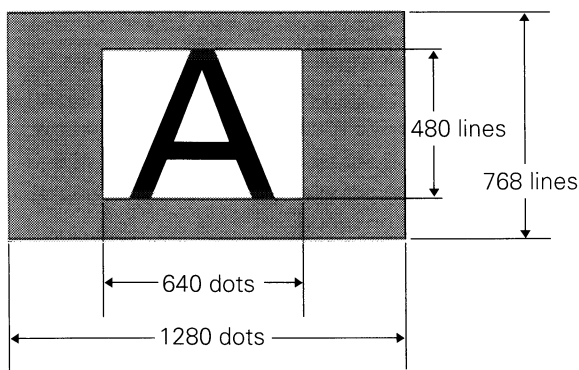
By distinguishing between signals such as S1, S2 and HDTV video signals, screen size is automatically selected and the following indicators are displayed on the screen.

Input signal	Operation	Screen indication
When S1 video signal (squeeze) is input	"FULL" screen size is automatically selected.	FULL (S1)
When S2 video signal (letterbox) is input	"ZOOM" screen size is automatically selected.	ZOOM (S2)
When HDTV signal (1920 x 1080 i, 1280 x 720 p, 1920 x 1080 p) is input	"FULL" screen size is automatically selected.	FULL (HD)

During personal computer signal input

① ORIGINAL

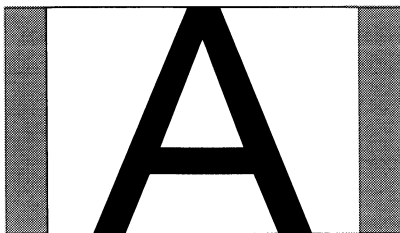
The input signal and the screen maintain a dot to line ratio of 1:1 and is thus highly faithful to the source.



(Illustration shows 640 x 480 input.)

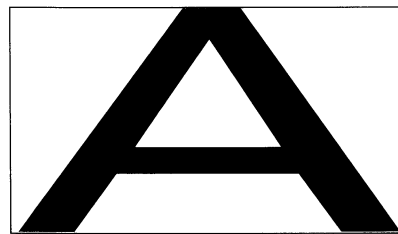
② 4:3 NORMAL

The display fills the screen as much as possible without altering the aspect ratio of the input signal.



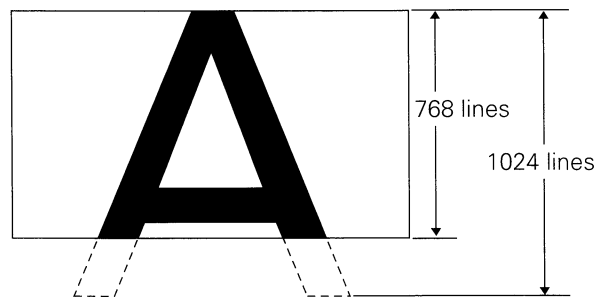
③ FULL

The display is presented with a widescreen aspect ratio of 16:9 and fills the entire screen.



④ ZOOM

The ZOOM setting is available only during personal computer input (1280 x 1024/60 Hz only). The input signal and the screen maintain a dot to line ratio of 1:1. Display is highly faithful to the source. However, in order to maintain the 1:1 ratio, a portion of the display will not appear on the screen.

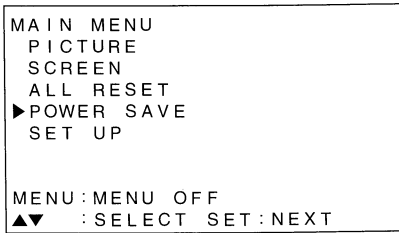


Use ▲/▼ to adjust the position of the video image on the screen.

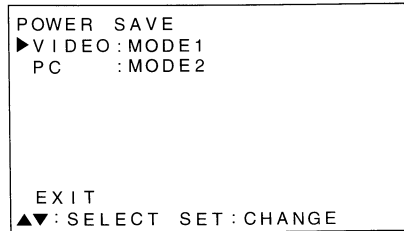
POWER SAVE

Using the POWER SAVE function of this unit, the power mode can be automatically put in standby mode when a video or computer signal has not been detected. (An indication will appear on the screen before the standby mode is engaged).

- 1 Press **MENU** to display the menu screen.
- 2 Press **▲/▼** to select **POWER SAVE**, and press **SET**.



- 3 Press **▲/▼** to select either **"VIDEO"** or **"PC"**.
Select **"VIDEO"** to set the POWER SAVE mode for input from video sources, or **"PC"** to set the POWER SAVE mode for input from personal computers.

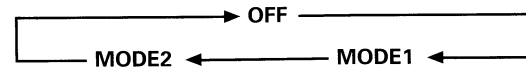


- 4 Press **SET** to select the **POWER SAVE** mode.
When **"VIDEO"** is selected, the POWER SAVE modes change as follows.



- When **"OFF"** is selected, this unit will stay in operation mode regardless of whether a synchronization signal is input or not.
- When **"MODE1"** is selected, this unit will be put in standby mode automatically if no new synchronization signal is input for 8 minutes.

When **"PC"** is selected, the PC POWER SAVE modes change as follows.



- When **"OFF"** is selected, this unit will stay in operation mode regardless of whether a synchronization signal is input or not.
- When **"MODE1"** is selected, this unit will be put in standby mode automatically if no new synchronization signal is input for 8 minutes.
- When **"MODE2"** is selected, this unit will be put in the POWER SAVE mode automatically if no new synchronization signal is input. However, if the synchronization signal is restored, this unit is put back in operation mode.

- 5 When the setup is finished, press **MENU** to exit the menu screen.

Note

The POWER SAVE setting is common to all inputs (INPUT1 to INPUT4).

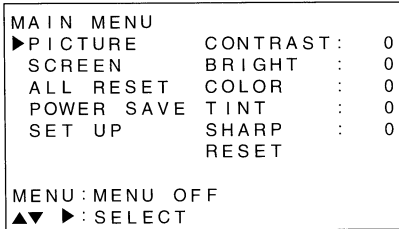
To put the unit in operation mode again

- When **"MODE 1"** is selected (the unit is put in the standby mode), press **STANDBY/ON** on the main unit or remote control to put this unit in operation mode again.
- When **"MODE 2"** is selected (the unit is put in the POWER SAVE mode), resuming PC operation or pressing **INPUT** on the main unit or remote control puts this unit in operation mode again.

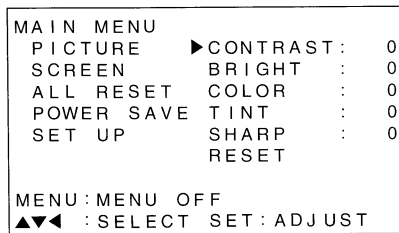
Display Panel Adjustments

Adjusting the picture quality

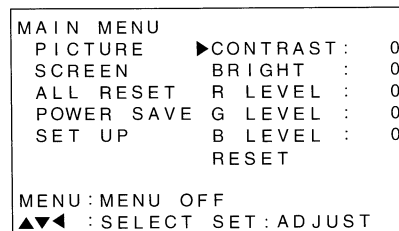
- 1 Press **MENU** to display the menu screen.
- 2 Press **▲/▼** to select **PICTURE**, then press **▶**.



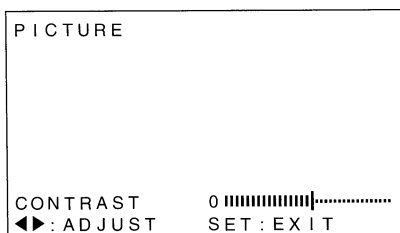
- 3 Press **▲/▼** to select the adjustment item, then press **SET**.



When viewing an image from a personal computer from INPUT3 or INPUT4, the following screen is displayed.



- 4 Press **◀/▶** to adjust the picture quality as desired.



Pressing **SET** writes the value into the memory and returns the display to the step 3 screen.

- 5 When the setup is finished, press **MENU** to exit the menu screen.

Note

Make these adjustments for each input (INPUT1 to INPUT4) and signals.

PICTURE mode adjustment items

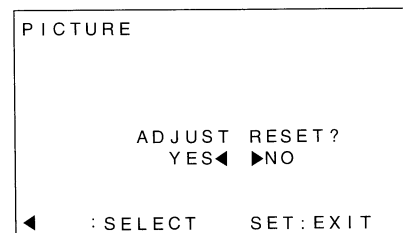
Below are brief descriptions of the options that can be set in the PICTURE mode.

- CONTRAST Adjust according to the surrounding brightness so that the picture can be seen clearly.
- BRIGHT Adjust so that the dark parts of the picture can be seen clearly.
- COLOR Adjust to the desired depth. (Setting to a slightly deep color will create a natural looking picture.)
- TINT Adjust so that skin color looks normal.
- SHARP Normally set to the center position. To create a softer picture, set to the left of center. To create a sharper picture, set to the right of center.
- R LEVEL Adjust the amount of red in the picture.
- G LEVEL Adjust the amount of green in the picture.
- B LEVEL Adjust the amount of blue in the picture.

To reset PICTURE mode settings to the default

If settings have been adjusted excessively or the picture on the screen no longer appears natural, it may prove more beneficial to reset the PICTURE mode to default settings instead of trying to make adjustments under already adjusted conditions.

- 1 In step 3 in the previous procedure, press **▲/▼** to select **RESET**, then press **SET**.



- 2 Press **◀** to select **YES**, and press **SET**.

All PICTURE mode settings are returned to the factory set default.

Adjusting the display image

Adjust when INPUT3 or INPUT4 is selected.
(Adjustments on this page cannot be made when INPUT 1 or INPUT 2 is selected. "---" is displayed if the adjustment is not available.)

- 1 Press **MENU** to display the menu screen.
- 2 Press **▲/▼** to select **SCREEN**, then press **▶**.

```

MAIN MENU
PICTURE      H. POSI. : 0
▶SCREEN      V. POSI. : 0
ALL RESET
POWER SAVE  V. SIZE  : 0
SET UP      CLK FRQ  : ---
              CLK PHS : ---
              RESET
MENU:MENU OFF
▲▼ ▶:SELECT
    
```

- 3 Press **▲/▼** to select the adjustment item, then press **SET**.

```

MAIN MENU
PICTURE      ▶H. POSI. : 0
SCREEN      V. POSI. : 0
ALL RESET
POWER SAVE  V. SIZE  : 0
SET UP      CLK FRQ  : ---
              CLK PHS : ---
              RESET
MENU:MENU OFF
▲▼◀ ▶:SELECT SET:ADJUST
    
```

When viewing an image from a personal computer, the following screen is displayed.

```

MAIN MENU
PICTURE      ▶H. POSI. : 0
SCREEN      V. POSI. : 0
ALL RESET
POWER SAVE  V. SIZE  : ---
SET UP      CLK FRQ  : 0
              CLK PHS : 0
              RESET
MENU:MENU OFF
▲▼◀ ▶:SELECT SET:ADJUST
    
```

- 4 Press **◀/▶** to carry out the adjustment.

```

SCREEN

H. POSITION    0
◀▶:ADJUST   SET:EXIT
    
```

Use **▲/▼** for the adjustments of V.POSITION and V.SIZE.
Pressing **SET** writes the value into the memory and returns the display to the step 3 screen.

- 5 When adjustment is finished, press **MENU** to exit the menu screen.

Note

Make these adjustments for each input (INPUT3 to INPUT4) and signals.

SCREEN mode adjustment items

Below are brief descriptions of the options that can be set in the SCREEN mode.

- H.POSITION Adjust the picture's position to the left or right.
- V.POSITION Adjust the picture's position upward or downward.
- V.SIZE Adjust the picture's length.
- CLK FREQ. Adjust letter breakup or noise on the screen. This setting adjusts the unit's internal clock signal frequency that corresponds to the input video signal.
- CLK PHASE Adjust so that there is minimum flicker of screen letters or color misalignment. This setting adjusts the phase of the internal clock signal adjusted by the CLK FREQ. setting.

Notes

- Adjustment of the picture's horizontal length is not possible.
- V. POSITION adjustment is not possible when the screen size is set to ZOOM or CINEMA WIDE.
To adjust the screen position upward or downward, please see page 22.
- When CLK FREQ. adjustment is carried out, the H.POSITION setting may have to be re-adjusted.
- If the adjustment items in the SCREEN mode are adjusted excessively, the picture may not be displayed properly.

To reset SCREEN mode settings to the default

If settings have been adjusted excessively or the picture on the screen no longer appears natural, it may prove more beneficial to reset the SCREEN mode to default settings instead of trying to make adjustments under already adjusted conditions.

- 1 In step 3 in the previous procedure, press **▲/▼** to select **RESET**, then press **SET**.

```

SCREEN

          ADJUST  RESET?
          YES◀ ▶NO

◀           :SELECT   SET:EXIT
    
```

- 2 Press **◀** to select **YES**, and press **SET**.
All SCREEN mode settings are returned to the factory set default.

Setting the regional TV system format

INPUT1 and INPUT2 are compatible with a number of TV system formats used around the world, which are automatically detected by this unit.

Normally "COLOR SYSTEM:AUTO" should be selected for automatic detection. However, some video signals are dubbed over or in certain conditions may not be displayed properly (loss of color, etc.) by this setting. In this case, change the setting according to the input signal.

Note

Setting the TV system format is required for both INPUT1 and INPUT2. Setting assignment and exclusive use according to the TV system format of your input signal will enable prompt processing of signals and reduction of time for input selection and possible errors in detecting signals.

- 1 Press **MENU** to display the menu screen.
The menu screen appears.

- 2 Press **▲/▼** to select **SET UP**, then press **SET**.

```

MAIN MENU
PICTURE
SCREEN
ALL RESET
POWER SAVE
▶SET UP

MENU:MENU OFF
▲▼:SELECT SET:NEXT
    
```

- 3 Press **▲/▼** to select **COLOR SYSTEM**.

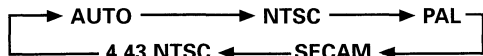
```

SET UP
▶COLOR SYSTEM :AUTO
3D Y/C MODE :STILL
HIGH CONTRAST:OFF

EXIT
▲▼:SELECT SET:CHANGE
    
```

- 4 Press **SET** repeatedly until the appropriate setting appears.

Each time **SET** is pressed, the settings change in the following order.



```

SET UP
▶COLOR SYSTEM :AUTO
3D Y/C MODE :STILL
HIGH CONTRAST:OFF

EXIT
▲▼:SELECT SET:CHANGE
    
```

- 5 When the setup is finished, press **MENU** to exit the menu screen.

Viewing a fast moving picture (3D Y/C MODE)

When viewing a fast moving picture such as might be experienced with a sports program, setting this mode to "MOTION" will reduce picture blur and create a clearer image. (3D Y/C MODE can only be set during signal input from INPUT1.)

- Set this mode to "STILL" when not viewing a fast moving picture.

- 1 Press **MENU** to display the menu screen.
The menu screen appears.

- 2 Press **▲/▼** to select **SET UP**, then press **SET**.

```

MAIN MENU
PICTURE
SCREEN
ALL RESET
POWER SAVE
▶SET UP

MENU:MENU OFF
▲▼:SELECT SET:NEXT
    
```

- 3 Press **▲/▼** to select **3D Y/C MODE**.

```

SET UP
COLOR SYSTEM :AUTO
▶3D Y/C MODE :STILL
HIGH CONTRAST:OFF

EXIT
▲▼:SELECT SET:CHANGE
    
```

- 4 Press **SET** to set the mode to "MOTION".

"MOTION" is set when this unit is shipped from the factory.

Each time **SET** is pressed, the settings change in the following order.



- 5 When the setup is finished, press **MENU** to exit the menu screen.

Notes

3D Y/C MODE setting is possible only when the unit is complying with all the following conditions:

- When INPUT1 is selected.
- While COLOR SYSTEM is set to AUTO and the unit is receiving an NTSC signal or when COLOR SYSTEM is set to NTSC.

Viewing in a bright location (HIGH CONTRAST)

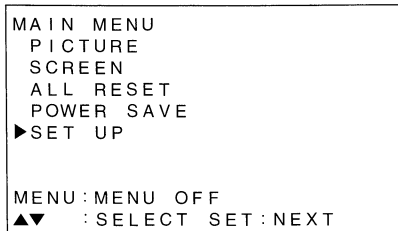
When viewing a picture in a bright location, setting this mode to "ON" will enable you to obtain a clear video image.

- Set this mode to "OFF" when not viewing in a bright location.

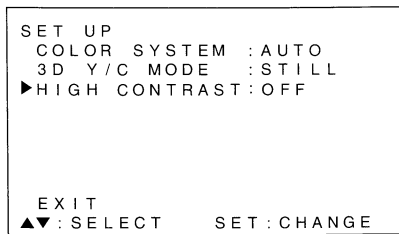
1 Press MENU to display the menu screen.

The menu screen appears.

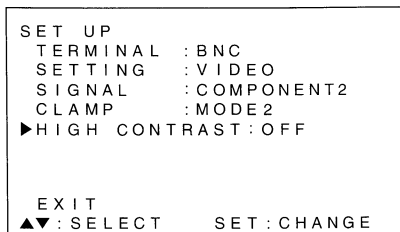
2 Press ▲/▼ to select SET UP, then press SET.



3 Press ▲/▼ to select HIGH CONTRAST.



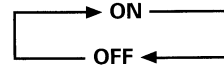
When viewing an image from INPUT 3 or INPUT 4, the following screen is displayed.



4 Press SET to set the mode to "ON".

"OFF" is set when this unit is shipped from the factory.

Each time **SET** is pressed, the settings change in the following order.



5 When the setup is finished, press MENU to exit the menu screen.

Notes

HIGH CONTRAST setting is possible only when selecting the video input signal from a connected video component.

Making the PC image brighter (ABL)

Set this mode to "ON" to brighten the image during PC signal input.

When ABL is set to "ON", the brightness of the image will change according to changes in the input signal. If you are bothered by changes to brightness during operation, set this mode to "OFF".

1 Press MENU to display the menu screen.

The menu screen appears.

2 Press ▲/▼ to select SET UP, then press SET.

```

MAIN MENU
PICTURE
SCREEN
ALL RESET
POWER SAVE
▶SET UP

MENU:MENU OFF
▲▼ :SELECT SET:NEXT
    
```

3 Press ▲/▼ to select ABL, then press SET.

```

SET UP
TERMINAL :BNC
SETTING :PC
SIGNAL :RGB
CLAMP :MODE1
▶ABL :OFF
H.ENHANCE: 0
V.ENHANCE: 0
EXIT
▲▼:SELECT SET:CHANGE
    
```

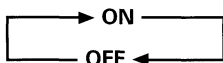
4 Press SET to set the mode to "ON".

"ON" is set when this unit is shipped from the factory.

```

SET UP
TERMINAL :BNC
SETTING :PC
SIGNAL :RGB
CLAMP :MODE1
▶ABL :ON
H.ENHANCE: 0
V.ENHANCE: 0
EXIT
▲▼:SELECT SET:CHANGE
    
```

Each time **SET** is pressed, the settings change in the following order.



5 When the setup is finished, press MENU to exit the menu screen.

Note

ABL mode setting is only possible during PC signal input. Make the setting for each input (INPUT3 or INPUT4).

Making the PC image clearer (H/V ENHANCE)

Adjust H/V ENHANCE to "ON" to view a clear image during PC signal input.

1 Press MENU to display the menu screen.

The menu screen appears.

2 Press ▲/▼ to select SET UP, then press SET.

```

MAIN MENU
PICTURE
SCREEN
ALL RESET
POWER SAVE
▶SET UP

MENU:MENU OFF
▲▼ :SELECT SET:NEXT
    
```

3 Press ▲/▼ to select H. ENHANCE or V. ENHANCE, then press SET.

```

SET UP
TERMINAL :BNC
SETTING :PC
SIGNAL :RGB
CLAMP :MODE1
ABL :OFF
▶H.ENHANCE: 0
V.ENHANCE: 0
EXIT
▲▼:SELECT SET:CHANGE
    
```

4 Press ◀/▶ or ▲/▼ to adjust.

To adjust H. ENHANCE, press ◀/▶.

```

SET UP

H.ENHANCE 0 ██████████|.....
◀▶:ADJUST SET:EXIT
    
```

To adjust V. ENHANCE, press ▲/▼.

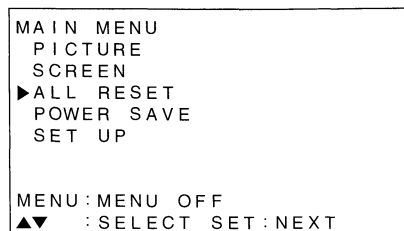
5 When the setup is finished, press MENU to exit the menu screen.

Note

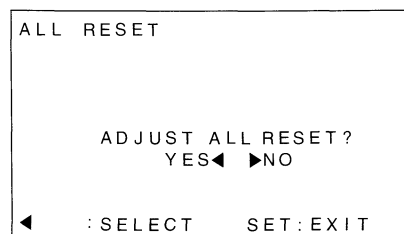
H. ENHANCE or V. ENHANCE mode adjusting is only possible during PC signal input. Make the adjustment for each input (INPUT3 to INPUT4).

Resetting the unit to factory set defaults

- 1 Press MENU to display the menu screen.**
The menu screen appears.
- 2 Press ▲/▼ to select ALL RESET, then press SET.**



- 3 Press ◀ to select YES, then press SET.**
All settings of the PICTURE and SCREEN modes are returned to the default settings (factory set defaults).



Cleaning

Regular cleaning will extend the life and performance of this unit. The recommended way to clean the display and related parts is described below.

Before cleaning, be sure to unplug the power cord from the power outlet.

Cleaning the display panel body and remote control

Do not under any circumstances use solvents such as benzene or thinner for cleaner. Use of such liquids may cause deterioration or peeling of paint from the display or remote control unit.

Wipe the display and remote control gently with a soft cloth. In the case of excessive dirt buildup, dampen a soft cloth with a diluted neutral cleaning detergent and after wringing the cloth thoroughly, wipe the component and then dry it with a dry soft cloth.

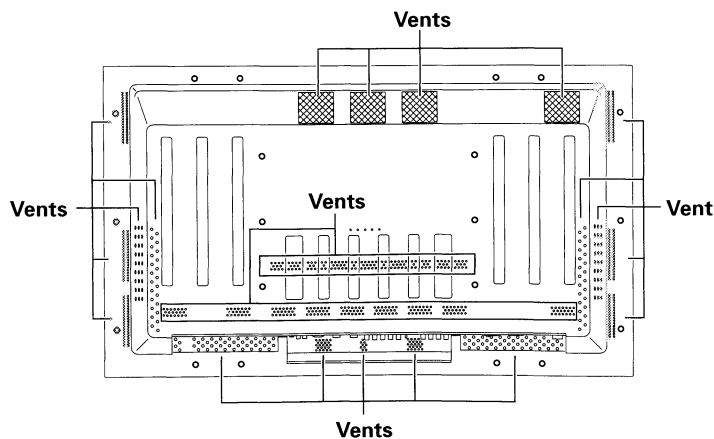
Cleaning the screen

After dusting, wipe the screen gently using the supplied cleaning cloth or a soft cloth. Do not use tissue or a rough cloth. As the surface of the screen is easily scratched, do not rub it or hit it with a hard object.

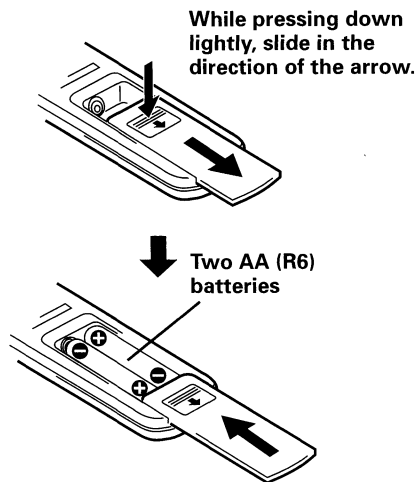
Cleaning the vents

As a general rule, use a vacuum cleaner about once a month to clean the vents on the rear panel of the display of dust buildup (set the vacuum cleaner to its weakest setting when doing this).

Using the unit without cleaning it of dust will cause the internal temperature to increase, resulting in possible breakdown or fire.



Inserting the batteries in the remote control unit



When handling the remote control unit

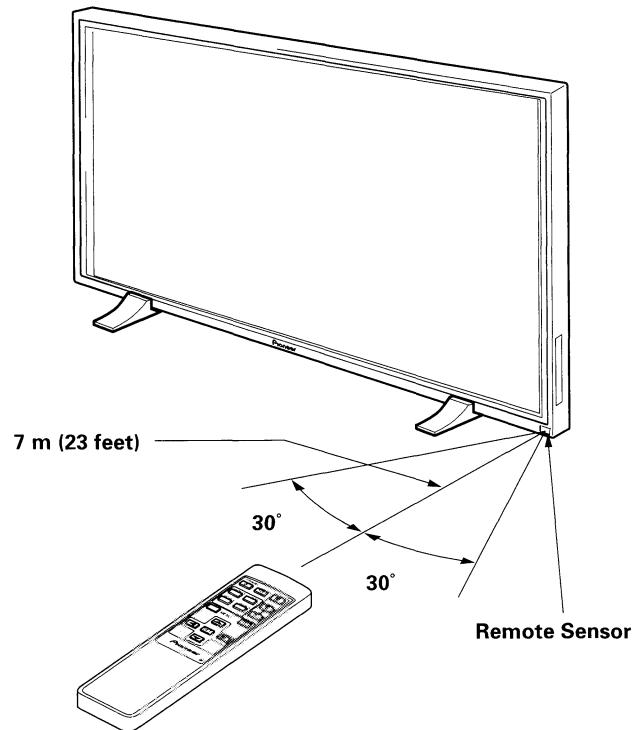
- Do not drop or shake the remote control.
- Do not use the remote control unit in a location subject to direct sunlight, heat radiation from a heater, or in a place subject to excessive humidity.
- When the remote control unit's batteries begin to wear out, the operable distance will gradually become shorter. When this occurs, replace all batteries with new ones as soon as possible.

CAUTION

- Insert batteries so that the plus (+) and minus (-) sides are aligned according to the markings in the battery case.
- Do not mix new batteries with used ones.
- The voltage of batteries may differ even if they are the same shape. Please do not mix different kinds of batteries together.
- When not using the remote control unit for a long period of time (1 month or more), remove the batteries from the remote control unit to prevent leaking of battery fluid. If battery liquid has leaked, thoroughly wipe the inside of the case until all liquid is removed, and then insert new batteries.
- Do not charge, short, disassemble or throw the provided batteries in a fire.

Operating range of the remote control unit

When operating the remote control unit, point it at the remote sensor (SR) located on the front panel of the main unit. The remote control unit is operable up to 23 feet (7 m) from the unit and within a 30° angle on each side of the sensor.



If you are having difficulty with operation of the remote control unit

- The remote control unit may not operate if there are objects placed between it and the display.
- Operational distance will gradually become shorter as the batteries begin to wear out, replace weak batteries with new ones as soon as possible.
- This unit discharges infrared rays from the screen. Placing a video deck or other component that is operated by an infrared remote control unit near this unit may hamper that component's reception of the remote control's signal, or prevent it from receiving the signal entirely. Should this occur, move the component to a position further away from this unit.
- Depending on the installation surroundings, this unit's remote control unit may be influenced by the infrared rays discharged from the plasma display, hampering reception of its rays or limiting its operational distance. The strength of infrared rays discharged from the screen will differ according to the picture displayed.

Troubleshooting

What may at first seem to be an malfunction, may be remedied with a quick check.

Please check to see if a warning is displayed on the screen. If displayed, refer to page 34 and check the mode. If there is no display check to see if the problem is listed below. The problem may also be caused by something other than this unit so please also check the other components being used such as a video deck. If the problem can still not be solved please consult the dealer where this unit was purchased.

General problems

Problem	Possible Solution
<ul style="list-style-type: none"> No power 	<ul style="list-style-type: none"> Is the power cord disconnected? (page 16) Has the MAIN POWER switch been switched on? (page 7)
<ul style="list-style-type: none"> Unit cannot be operated. 	<ul style="list-style-type: none"> External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the main power on/off, or unplugging the power cord and re-plugging it in after 1 to 2 minutes.
<ul style="list-style-type: none"> Remote control does not operate. 	<ul style="list-style-type: none"> Are batteries inserted with polarity (+, -) correctly aligned? (page 31) Are batteries worn out? (Replace with new batteries). Is the plug inserted in the CONTROL IN terminal? Because reception of the remote control's signal will not be possible if the plug is inserted, please check connections (page 16).
<ul style="list-style-type: none"> Picture is cut off. 	<ul style="list-style-type: none"> Is the selected screen size correct? Switch to another screen size (pages 22 and 23). Are SCREEN mode adjustments such as picture size made correctly? (page 26).
<ul style="list-style-type: none"> Strange color, light color, or dark, or color misalignment 	<ul style="list-style-type: none"> Adjust the picture tone (page 25). Is the room too bright? The picture may look dark in a room that is too bright.
<ul style="list-style-type: none"> Power is suddenly turned off. 	<ul style="list-style-type: none"> The unit's internal temperature has increased. (Air vents are blocked.) Remove any objects blocking vent or clean (page 30). Is the POWER SAVE mode set to "MODE1" or "MODE2"? (page 24)
<ul style="list-style-type: none"> No picture 	<ul style="list-style-type: none"> Is connection to other components correct? (pages 10 to 13) Has setup been done correctly after connection? (pages 18 and 19) Is the correct input selected? (page 20) Is a non-compatible signal being input? (pages 10, 14, 36 and 37) Is picture adjustment correct? (page 25)

Problems commonly mistaken as breakdown

Problem	Possible Solution
<ul style="list-style-type: none"> The screen is displayed in a small size. 	<ul style="list-style-type: none"> Check the input signal compatibility chart (pages 36 and 37). Is the correct screen size selected? (pages 22, 23 and 26)
<ul style="list-style-type: none"> Letter breakup on screen. 	<ul style="list-style-type: none"> Adjust using "SCREEN" mode on the menu screen (page 26). If there is still no improvement, this unit may be limiting the displayable range. Check the personal computer input signal compatibility chart (pages 36 and 37).
<ul style="list-style-type: none"> A sharp sound is sometimes heard from the cabinet. 	<ul style="list-style-type: none"> Expansion/contraction caused by surrounding temperature change may result in sound being heard from the cabinet. This is not a malfunction.
<ul style="list-style-type: none"> Bright portions of image appear to be losing intensity. 	<ul style="list-style-type: none"> When the video input signal's level is too high, the bright portions may appear to be losing their intensity. Increase the adjustment level of the contrast and check the picture (page 25).
<ul style="list-style-type: none"> Speckles or noise appears on screen. 	<ul style="list-style-type: none"> May be caused by radio wave interference from appliances with motors such as hair dryers, electric vacuum cleaners, electric power drills, ignition systems of cars, motorcycles etc., switch devices such as thermostats etc., neon signs or electrical discharge from power lines etc..
<ul style="list-style-type: none"> Stripes appear on the screen. 	<ul style="list-style-type: none"> May be caused by radio wave mingling from TV station, FM station, amateur radios, public radios (simplified radios) etc., or a nearby personal computer, TV, or video/audio component. A strong electromagnetic field may cause picture distortion and similar problems.
<ul style="list-style-type: none"> Operation is not possible. 	<ul style="list-style-type: none"> External influences such as lightning strike, static electricity etc., may cause improper operation. In this case, operate the unit after first turning the main power ON/OFF, or unplugging the power cord and re-plugging it in after 1 to 2 minutes.
<ul style="list-style-type: none"> Sound is heard from inside the unit. 	<ul style="list-style-type: none"> Sound of fan revolving. This is not a malfunction.

Although this unit incorporates high precision technology in its design, please understand that there may be extremely slight pixel breakup, or light emission fault.

Note

In order to protect this unit's panels and circuitry, the revolving speed of the interval fan will be automatically increased in order to cool the inside of the unit when the surrounding temperature exceeds 40 °C (104 °F). (The sound of the fan will become louder at this time). Please operate this unit in a location with a surrounding temperature under 40 °C (104 °F).

Additional cautions

- If the power is automatically turned off during operation of this unit, the following reasons may be the cause.
 - Is the POWER SAVE mode set to "MODE1" or "MODE2"? (page 24)
 - The surrounding temperature has risen above 40 °C (104 °F). Please operate this unit in a location with a surrounding temperature under 40 °C (104 °F).
 - The vents are blocked or the internal temperature has risen abnormally due to abnormal heat generation of internal parts etc..

If the power is automatically turned off for a reason other than the above reasons, there could be a malfunction. In this case, unplug the power cord from the power outlet and request repair from your nearest sales outlet.

- The plasma display panel of this unit is very bright and viewing it a close distance will cause eye strain. We recommend that you view the screen from a suitable distance (9.8 to 19.7 feet (3 to 6m)).

About the plasma panel's protection function

The brightness of this display will deteriorate slightly when an image with little movement such as a photograph or computer image is continuously displayed. This is caused by the plasma panel's protection function which detects images with slight movement and automatically adjusts brightness to protect the display, and is not a malfunction.

This function starts approximately 5 minutes after the power has been turned on or after input has been switched.

About the self diagnosis mode

Messages appear on the bottom of this unit's screen to indicate operation or connection faults. After message confirmation, check the condition of the unit.

If this message appears	Please do this
OUT OF RANGE or PLEASE CHANGE RESOLUTION OR REFRESH RATE	<ul style="list-style-type: none"> A incompatible signal is being input. Check the PC input signal compatibility chart on page 37 and change the output signal setting on the computer side.
THERMAL WARNING! PLEASE SHUT DOWN	<ul style="list-style-type: none"> Turn off main power (page 7). Has the room temperature exceeded 40 °C (104 °F) ? Reduce the room temperature. If the unit's vents are blocked, unblock them.

CAUTION

Panel sticking and after-image lag

- Displaying the same images such as still images for a long time may cause after-image lagging. This may occur in the following two cases.

- After-image lagging due to remaining electrical load**
 When image patterns with very high peak luminance are displayed for more than 1 minute, after-image lagging may occur due to the remaining electric load. The after-images remaining on the screen will disappear when moving images are displayed. The time for the after-images to disappear depends on the luminance of the still images and the time they had been displayed.
- After-image lagging due to sticking**
 Avoid displaying the same images continuously over a long period of time with the Plasma Display. When images of the same pattern are displayed continuously for several hours or displayed for a short period of time every day, after-images may remain on the screen due to the sticking of the fluorescent materials. In this case, these images may decrease if moving images are displayed after them, but basically they will not disappear.

Specifications

General

Light emission panel 50 inch plasma display panel
 Number of pixels 1280 x 768
 Power supply AC 100 - 120 V, 50/60 Hz
 Power consumption 470 W
 Standby power consumption 0.6 W
 External dimensions 1218 (W) x 714 (H) x 98 (D) mm
 47-31/32 (W) x 28-1/8 (H) x 3-7/8 (D) in.
 (including display stand)
 1218 (W) x 737 (H) x 300 (D) mm
 47-31/32 (W) x 29-1/32 (H) x 11-13/16 (D) in.
 Weight 40.3 kg (88 lbs. 14 oz)
 (including display stand) 41.0 kg (90 lbs. 7 oz)
 Operating temperature range 0 to 40 °C (32 to 104 °F)
 Operating atmospheric pressure range
 0.8 to 1.1 atmospheric pressure

Input/output

Video

INPUT 1

Input BNC jack
 • Composite video signal
 1 Vp-p/75 Ω/negative sync.

Output BNC jack
 75 Ω /with buffer

INPUT 2

Input ① S terminal (Mini DIN 4 pin)
 ② BNC jack (x2)
 • Y/C separate video signal (S2 compatible)
 Y ... 1 Vp-p/75 Ω/negative sync.
 C ... 0.286 Vp-p/75 Ω (NTSC)
 0.3 Vp-p/75 Ω (PAL)

INPUT 3

Input BNC jack (x5)
 ① RGB signal (G ON SYNC compatible)
 RGB ... 0.7 Vp-p/75 Ω/no sync.
 HD/CS, VD ... TTL level
 /positive and negative polarity/
 75 Ω or 2.2 kΩ
 (impedance switch)
 G ON SYNC ...
 1 Vp-p/75 Ω/negative sync.
 ② Component video signal
 Y ... 1 Vp-p/75 Ω/negative sync.
 C_B/P_B, C_R/P_R
 ... 0.525 Vp-p/75 Ω
 (75% saturation level)

INPUT 4

Input Mini D-sub 15 pin (socket connector)
 ① RGB signal (G ON SYNC compatible)
 RGB ... 0.7 Vp-p/75 Ω/no sync.
 HD/CS, VD ... TTL level
 /positive and negative polarity
 /2.2 kΩ
 G ON SYNC
 ... 1 Vp-p/75 Ω/negative sync.
 *Compatible with Microsoft's Plug & Play
 (VESA DDC1/2B)
 ② Component video signal
 Y ... 1 Vp-p/75 Ω/negative sync.
 C_B/P_B, C_R/P_R
 ... 0.525 Vp-p/75 Ω
 (75% saturation level)

Output Mini D-sub 15 pin connector (socket)
 75 Ω/with buffer

Audio

Input AUDIO INPUT (for INPUT 1/2)
 Pin jack (x2)
 L/R ... 500mVrms/more than 10 kΩ

AUDIO INPUT (for INPUT 3/4)
 Stereo mini jack
 L/R ... 500mVrms/more than 10 kΩ

Output AUDIO OUTPUT
 Stereo mini jack
 L/R ... 500mVrms (max)/less than 5 kΩ

SPEAKER
 L/R ... 8 - 16 Ω/2W +2W (at 8 Ω)

Control

RS-232C ... D-sub 9 pin (pin connector)
 COMBINATION IN/OUT
 ... Mini DIN 6 pin (x2)
 CONTROL IN/OUT ... monaural mini jack (x2)

Accessories

Power cord	1
Pin/BNC conversion adaptor	1
Remote control unit	1
Remote control unit case	1
AA (R6/UM-3) batteries	2
Cleaning cloth	1
Speed clamp	2
Bead band	2
Warranty	1
Operations Instructions	1
Display stand	2
Washer (large)	2
Washer (small)	2
Hex hole bolt (M8X40)	2

• Due to improvements, specifications and design are subject to change without notice.

Supplement 1

Video signal compatibility table (INPUT3, INPUT4)

Vertical frequency Fv (Hz)	Horizontal frequency Fh (kHz)	Signal format	Screen size					Remarks
			4.3 NORMAL	FULL	ZOOM	CINEMA WIDE	NATURAL WIDE	
50	15.625	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	31.25	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
60	15.734	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	480i (SDTV)
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	31.5	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	480p (SDTV)
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	33.75	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1080i (HDTV)
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	45.0	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	720p (HDTV)
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
	67.5	Component	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1080p (HDTV)
		RGB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Supplement 2

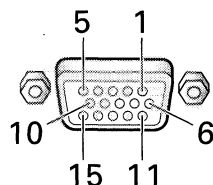
PC signal compatibility table (INPUT3, INPUT4)

Resolution (Dot x Line)	Vertical frequency	Horizontal frequency	Screen size (Dot x line)				Remarks
			ORIGINAL	4.3 NORMAL	FULL	ZOOM	
640x400	56.4Hz	24.8kHz			○ 1280x768		NEC PC-9800
	70.1Hz	31.5kHz			↑		NEC PC-9800
640x480	60Hz	31.5kHz	◎ 640x480	○ 1024x768	○ 1280x768		(852x480) (864x480)
	66.7Hz	35.0kHz	↑	↑	↑		Apple Macintosh 13"
	72Hz	37.9kHz	↑	↑	↑		
	75Hz	37.5kHz	↑	↑	↑		
	85Hz	43.3kHz	↑	↑	↑		
800 x600	56Hz	35.2kHz	◎ 800x600	○ 1024x768	○ 1280x768		
	60Hz	37.9kHz	↑	↑	↑		(1072x600)
	72Hz	48.1kHz	↑	↑	↑		
	75Hz	46.9kHz	↑	↑	↑		
	85Hz	53.7kHz	◎ 800x600	○ 1024x720	○ 1280x720		
832x624	74.6Hz	49.7kHz	◎ 832x624	○ 1024x748	○ 1280x748		Apple Macintosh 16"
1024x768	43Hz Interlace	35.5kHz	△ 1024x768		△ 1280x768		
	60Hz	48.4kHz	◎ 1024x768		○ 1280x768		(1376x768)
	70Hz	56.5kHz	↑		↑		
	75Hz (74.9Hz)	60.0kHz (60.2kHz)	↑		↑		() indicates Apple Macintosh 19"
	85Hz	68.7kHz	↑		↑		
1152x864	60Hz	53.7kHz		△ 1024x768	△ 1280x768		
	72Hz	64.9kHz		↑	↑		
	75Hz	67.7kHz		↑	↑		
1152x870	75.1Hz	68.7kHz		△ 1024x768	△ 1280x768		Apple Macintosh 21"
1152x900	66.0Hz	61.8kHz		△ 1024x768	△ 1280x768		Sun Microsystems LO
	76.0Hz	71.7kHz		↑	↑		Sun Microsystems HI
1280x768	56Hz	45.1kHz	◎ 1280x768				
1280x960	60Hz	60.0kHz		△ 1024x768	△ 1280x768		
1280x1024	43Hz Interlace	46.4kHz			△ 1280x768		
	60Hz	64.0kHz		△ 960x768	△ 1280x768	◎ 1280x768	
	75Hz	80.0kHz		△ 960x768			(1600x1024)
	85Hz	91.1kHz		↑			
1600 x 1200	60Hz	75.0kHz		△ 1024x768			
	65Hz	81.3kHz		↑			
	70Hz	87.5kHz		↑			

- ◎ : Optimal picture. Adjustment of picture position, frequency, phase etc., may be necessary. : Not available.
 ○ : Picture will be enlarged but some fine detail will be hard to see.
 △ : Simple reproduction. Fine detail will not be reproduced. Screen size will be displayed as "~ (TYPE)".

Supplement 3

Signal assignment of INPUT 4 (Mini D-sub 15 pin socket connector)



Pin No.	Input	Output
1	R or CR/PR	←
2	G or Y	←
3	B or CB/PB	←
4	NC (No connection)	←
5	GND	NC (No connection)
6	GND	←
7	GND	←
8	GND	←
9	DDC + 5V	NC (No connection)
10	GND	←
11	NC (no connection)	←
12	DDC SDA	NC (No connection)
13	HD or H/V SYNC	←
14	VD	←
15	DDC SCL	NC (No connection)

Explanation of Terms

Aspect ratio

The TV screen's width to height ratio is referred to as its aspect ratio. The aspect ratio on standard TVs is 4:3 and on wide TVs or High Definition TVs it is 16:9.

S jack (S VIDEO jack)

This jack separates and transmits the video signal as two signals; the luminance (Y) signal and the color(C) signal. Because of this, picture reproduction is superior to that obtained at the composite input/output jacks.

S-video signal

The video signal is composed of two signals; the chroma signal (color signal) which reproduces color and the luminance signal which reproduces light and darkness. With standard video components, these two signals are combined into one and are handled as a video signal referred to as the "composite signal". The S-video signal, however, is a signal that handles these two signals separately. Because they are not combined as in the composite video signal, the high quality of both signals can be retained.

S1 VIDEO signal/S2 VIDEO signal

This refers to signals that include wide screen picture data such as squeeze or letterbox data with the color signal (C) that is input through the S VIDEO jack.

Component video signal

General term for video signal format composed of the Y.Cb.Cr, Y.Pb.Pr and Y.B-Y.R-Y luminance signal + color signal.

The component video signal is sometimes simply called the "color difference signal".

G ON SYNC

This indicates a video signal in the form of a synchronization signal added to the G (GREEN) signal of the R.G.B signal.

VGA

VGA is short for "Video Graphics Array".

Generally this indicates a 640 dot x 480 line resolution.

XGA

General term for "eXtended Graphics Array".

Generally this indicates a 1024 dot x 768 line resolution.

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8 0 0 - 4 2 1 - 1 6 2 5


Please do not ship your product to Pioneer without first calling the Customer Service Department at the above listed number for assistance.

PIONEER ELECTRONICS SERVICE, INC.
CUSTOMER SERVICE DEPARTMENT
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